

ABSTRACT

An apparatus comprises one or more product carrying regions for carrying products for purchase and one or more handles for grasping by a customer to move the apparatus around a store. The apparatus includes one or more sensors to detect one or more products for purchase placed in the one or more product carrying regions.

Application Data Sheet 37 CFR 1.76

The Application Data Sheet is part of the provisional or non-provisional application for which it is being submitted. The following form contains the bibliographic data arranged in a format specified by the United States Patent and Trademark Office as outlined in 37 CFR 1.76.

Inventor Information

of inventors: 2

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Residence Information

US Residency
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Application Information

Customer number 138517 -

Correspondence address ---

Title of invention **METHOD AND APPARATUS FOR SENSING PRODUCTS FOR PURCHASE**

Attorney docket number **1348.002US6**

Entity status Small

Application type Nonprovisional Application under 35 USC 111(a)

Subject matter Utility

Total number of drawing sheets 3

Suggested figure for publication ---

Filing by reference No

Publication request Normal eighteen-month publication

Representative Information

of representatives: 1

Representative information should be provided for all practitioners having a power of attorney in the application. Providing this information in the Application Data Sheet does not constitute a power of attorney in the application (see 37 CFR 1.32).

Customer number 138517

Domestic Benefit/National Stage Information

of benefit claims: 4

This section allows for the applicant to either claim benefit under 35 U.S.C. 119(e), 120, 121, or 365(c), 386(c), or indicate National Stage entry from a PCT application. Providing benefit claim information in the Application Data Sheet constitutes the specific reference required by 35 U.S.C. 119(e) or 120, and 37 CFR 1.78(a)(2) or CFR 1.78(a)(4), and need not otherwise be made part of the specification.

Prior app status Pending

Application number	---
Continuity type	Continuation of
Prior app number	16012513
Filing Date	06/19/2018

Prior app status	Patented
Application number	16012513
Continuity type	Division of
Prior app number	15800885
Filing Date	11/01/2017
Patent number	10219199
Issue date	02/26/2019

Prior app status	Patented
Application number	15800885
Continuity type	Continuation of
Prior app number	15251882
Filing Date	08/30/2016
Patent number	9832708
Issue date	11/28/2017

Prior app status	Patented
Application number	15251882
Continuity type	Continuation of
Prior app number	12264711
Filing Date	11/04/2008
Patent number	9462411
Issue date	10/04/2016

Foreign Priority Information

of foreign priority claims: 0

This section allows for the applicant to claim benefit of foreign priority and to identify any prior foreign application for which priority is not claimed. Providing this information in the Application Data Sheet constitutes the claim for priority as required by 35 U.S.C. 119 (b) and 37 CFR 1.55. When priority is claimed to a foreign application that is eligible for retrieval under the priority document exchange program (PDX) the information will be used by the Office to automatically attempt retrieval pursuant to 37 CFR 1.55(i)(1) and (2). Under the PDX program, applicant bears the ultimate responsibility for ensuring that a

copy of the foreign application is received by the Office from the participating foreign intellectual property office, or a certified copy of the foreign priority application is filed, within the time period specified in 37 CFR 1.55(g)(1).

 Data was not provided for this section.

Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications

Checking this box will cause the application to be examined under the first inventor to file provisions of the AIA.

- ☐ This application (1) claims priority to or the benefit of an application filed before March 16, 2013 and (2) also contains, or contained at any time, a claim to a claimed invention that has an effective filing date on or after March 16, 2013.
NOTE: By providing this statement under 37 CFR 1.55 or 1.78, this application, with a filing date on or after March 2016, 2013, will be examined under the first inventor to file provisions of the AIA.

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When this Application Data Sheet is properly signed and filled with the application, applicant has provided written authority to permit a participating foreign intellectual property (IP) office access to the instant application-as-filed (see paragraph A in subsection 1 below) and the European Patent Office (EPO) access to any search results from the instant application (see paragraph B in subsection 1 below).

Should applicant choose not to provide an authorization identified in subsection 1 below, applicant **must opt-out** of the authorization by checking the corresponding box A or B or both in subsection 2 below.

NOTE:

This section of the Application Data Sheet is **ONLY** reviewed and processed with the **INITIAL** filing of an application. After the initial filing of an application, an Application Data Sheet cannot be used to provide or rescind authorization for access by a foreign IP office(s). Instead, Form PTO/SB/39 or PTO/SB/69 must be used as appropriate.

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B.

Search Results from U.S. Application to EPO

Unless box B in subsection 2 (opt-out of authorization) is checked, the undersigned hereby **grants the USPTO authority** to provide the EPO access to the bibliographic data and search results from the instant patent application when a European patent application claiming priority to the instant patent application is filed. See 37 CFR 1.14(h)(2).

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A. Applicant **DOES NOT** authorize the USPTO to permit a participating foreign IP office access to the instant application-as-filed. If this box is checked, the USPTO will not be providing a participating foreign IP office with any documents and information identified in subsection 1A above.

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NOTE:

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Applicant Information

of applicants: 1

The information to be provided in this section is the name and address of the legal representative who is the applicant under 37 CFR 1.43; or the name and address of the assignee, person to whom the inventor is under an obligation to assign the invention, or person who otherwise shows sufficient proprietary interest in the matter who is the applicant under 37 CFR 1.46.

1. **Telcom Ventures LLC**
200 South Biscayne Blvd., 40th Floor
Miami, FL 33131
UNITED STATES

Applicant	Organization
Applicant type	Assignee

Phone: ---
Fax: ---
Email: ---

Assignee Information including Non-Applicant Assignee Information

of assignees: 0

An assignee-applicant identified in the "Applicant" section will appear on the patent application as an applicant.

Providing assignment information in this section does not substitute for compliance with any requirement of part 3 of Title 37 of CFR to have an assignment recorded by the Office.

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Signature

NOTE:

This Application Data Sheet must be signed in accordance with 37 CFR 1.33(b). However, if this Application Data Sheet is submitted with the INITIAL filing of the application and either box A or B is not checked in subsection 2 of the "Authorization or Opt-Out of Authorization to Permit Access" section, then this form must also be signed in accordance with 37 CFR 1.14(c)

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See CFR 1.4(d) for the manner of making signatures and certifications.

Signature	First name	Last name	Registration #	Date
/Aaron W. Pederson/	Aaron	Pederson	58607	05/12/2020

Claims:

1. An apparatus comprising:
one or more product carrying regions for carrying products for purchase;
one or more handles for grasping by a customer to move the apparatus around a store; and
one or more sensors to detect one or more products for purchase placed in the one or more product carrying regions.
2. The apparatus of claim 1, further comprising:
a computing system communicatively coupled to the one or more sensors, the computing system configured to identify one or more products added to the one or more product carrying regions based on information from the one or more sensors.
3. The apparatus of claim 2, wherein the computing system is further configured to identify one or more products removed from the one or more product carrying regions based on information from the one or more sensors.
4. The apparatus of claim 2, wherein the computing system is further configured to obtain at least one of a weight, manufacturer, expiration date, nutritional value and price of a product.
5. The apparatus of claim 2, wherein the computing system is further configured to initiate a transaction to pay for products in the one or more product carrying regions.
6. The apparatus of claim 1, wherein the apparatus is a shopping cart.
7. The apparatus of claim 1, wherein the one or more sensors include one or more of a radio frequency (RF) tagging sensor, a bar-code sensor, and an image recognition sensor.
8. A shopping cart comprising:
one or more sensors; and
data transfer electronics, communicatively coupled to a processing device and to one or more sensors, that cause the processing device to:

identify an object in the shopping cart based on information from the one or more sensors; and
obtain one or more of a weight, manufacturer, expiration date, nutritional value and price of the object.

9. The shopping cart of claim 8, wherein the data transfer electronics further cause the processing device to:

establish a short-range wireless communications link with the data transfer electronics; and

receive, via the short-range wireless communications link data relating to at least one of a weight, manufacturer, expiration date, nutritional value and price of the object that is being placed in the shopping cart.

10. The shopping cart of claim 9, wherein the processing device comprises a wireless communications device.

11. The shopping cart of claim 10, wherein the data transfer electronics sends to the wireless communication device data associated with a weight, manufacturer, expiration date, nutritional value and price of the object that is being placed in the shopping cart.

12. The shopping cart of claim 11, wherein the short-range communications link that is established with the wireless communication device is responsive to an action performed by the wireless communications device.

13. The shopping cart of claim 8, wherein the data transfer electronics cause the processing device to:

determine that an object has been added to the shopping cart; and
determine that an object has been removed from the shopping cart.

14. The shopping cart of claim 13, wherein the processing device is enabled to perform a transaction to pay for one or more objects that are in the shopping cart.

15. The shopping cart of claim 14, wherein the processing device is enabled to perform the transaction to pay for the one or more objects that are in the shopping cart responsive to being proximate to a specific location.

16. The shopping cart of claim 15, wherein the specific location comprises a check-out counter.

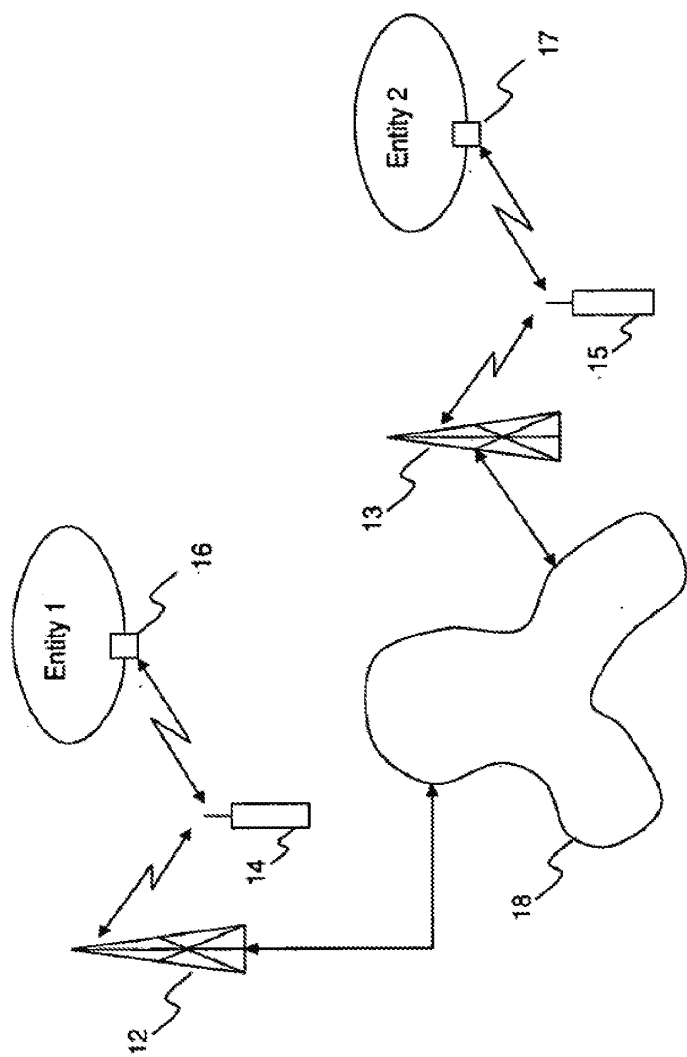
17. The shopping cart of claim 8, wherein the one or more sensors include one or more of a radio frequency (RF) tagging sensor, a bar-code sensor, and an image recognition sensor.

18. A method performed by an apparatus having one or more carrying regions for carrying products for purchase, the method comprising:
detecting one or more products for purchase in the one or more carrying regions;
determining, based on the detecting, that one or more products has been added to the one or more carrying regions;
determining, based on the detecting, that one or more products has been removed from the one or more carrying regions; and
initiating a transaction to pay for products in the one or more product carrying regions.

19. The method of claim 18, further comprising:
obtaining at least one of a weight, manufacturer, expiration date, nutritional value or price of a product in the one or more carrying regions.

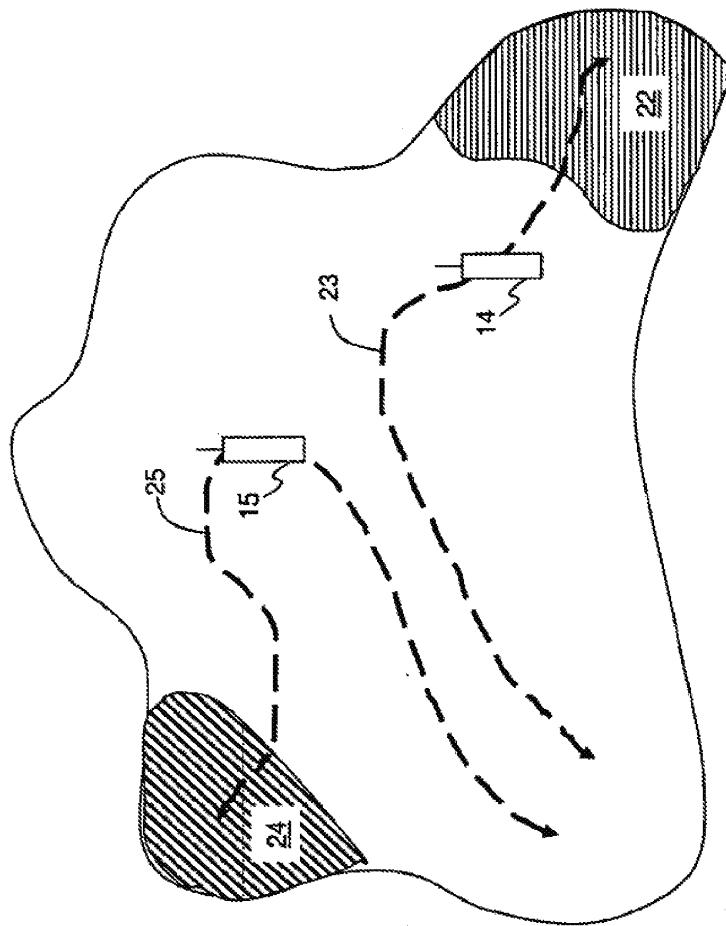
20. The method of claim 18, further comprising:
establishing a short-range communications link with a wireless communication device; and
sending to the wireless communication device over the short-range communications link information for one or more products in the one or more carrying regions.

21. The method of claim 20, wherein sending information to the wireless communication device includes sending one or more of a weight, manufacturer, expiration date, nutritional value and/or price of one or more products.
22. The method of claim 21, wherein sending information to the wireless communication device includes sending information identifying a product that has been added to or removed from the one or more carrying regions.
23. The method of claim 18, wherein detecting one or more products includes detecting based upon one or more of a radio frequency (RF) tagging technology, a bar-code technology, and an image recognition technology.
24. The method of claim 18, wherein the apparatus is a shopping cart.
25. The method of claim 18, wherein said initiating a transaction occurs responsive to a proximity with a specific location.



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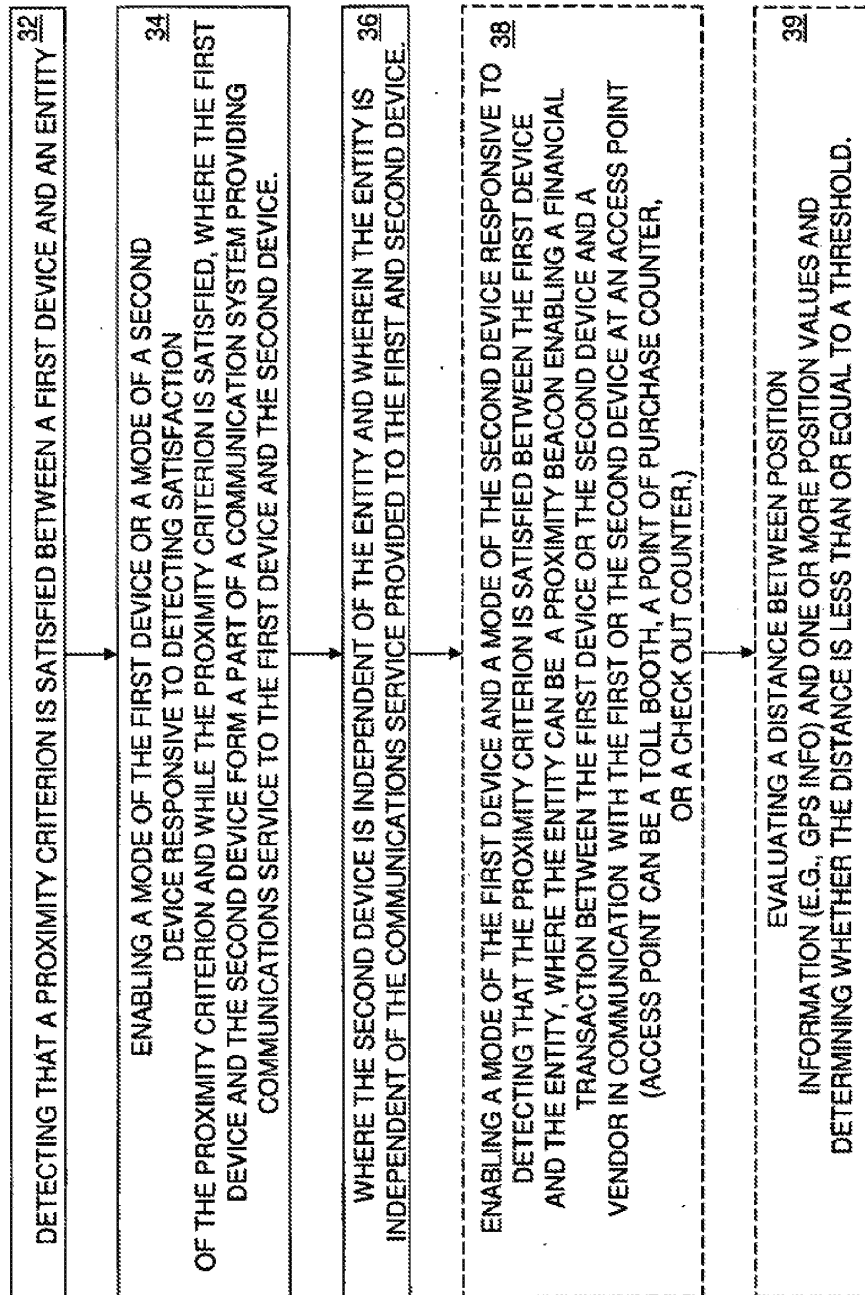
FIG. 1



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FIG. 2

FIG. 3 30



Doc code: IDS

Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (02-18)

Approved for use through 11/30/2020. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number	
	Filing Date	2020-05-12
	First Named Inventor	Peter D. Karabinis
	Art Unit	
	Examiner Name	
	Attorney Docket Number	1348.002US6

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	1	6595929	B2	2003-07-22	Stivoric et al.	
	2	6769607	B1	2004-08-03	Pitroda et al.	
	3	6944981	B1	2005-09-20	Garberg et al.	
	4	6957107	B2	2005-10-18	Rogers et al.	
	5	7028897	B2	2006-04-18	Fernandes et al.	
	6	7133659	B2	2006-11-07	Zalewski et al.	
	7	7155199	B2	2006-12-26	Zalewski et al.	
	8	7503504	B2	2009-03-17	Mitra	

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	Examiner Name		
	Attorney Docket Number	1348.002US6	

	9	7539241	B1	2009-05-26	Dick	
	10	7780081	B1	2010-08-24	Liang	
	11	7822644	B2	2010-10-26	Alberth Jr. et al.	
	12	7912629	B2	2011-03-22	Sutter et al.	
	13	8023580	B2	2011-09-20	Bremer	
	14	8091780	B2	2012-01-10	Todd et al.	
	15	8249935	B1	2012-08-21	DiMartino et al.	
	16	8463238	B2	2013-06-11	Forstall et al.	
	17	8532069	B2	2013-09-10	Balwani	
	18	8646060	B1	2014-02-04	Ayed	
	19	8965281	B2	2015-02-24	Raisanen et al.	

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	Art Unit		
	Examiner Name		
	Attorney Docket Number		1348.002US6

	20	RE39736		2007-07-17	Morrill Jr.	
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	1	20030220105	A1	2003-11-27	Daigremont et al.	
	2	20040030601	A1	2004-02-12	Pond et al.	
	3	20040143505	A1	2004-07-22	Kovach	
	4	20040143550	A1	2004-07-22	Creamer et al.	
	5	20040170430	A1	2004-09-02	Gorokhov	
	6	20060009234	A1	2006-01-12	Freer	
	7	20060085297	A1	2006-04-20	Minerley	
	8	20060133633	A1	2006-06-22	Hyvonen et al.	

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	Attorney Docket Number	1348.002US6	

	9	20060145893	A1	2006-07-06	Hassett	
	10	20060159260	A1	2006-07-20	Pereira et al.	
	11	20060165060	A1	2006-07-27	Dua	
	12	20060172700	A1	2006-08-03	Wu	
	13	20060194538	A1	2006-08-31	Palin et al.	
	14	20070129077	A1	2007-06-07	Iguchi et al.	
	15	20070167147	A1	2007-07-19	Krasner et al.	
	16	20070178935	A1	2007-08-02	Shim et al.	
	17	20070184837	A1	2007-08-09	Hohl et al.	
	18	20070197261	A1	2007-08-23	Humbel	
	19	20070243872	A1	2007-10-18	Gallagher et al.	

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	20	20070250393	A1	2007-10-25	Alberth et al.	
	21	20070260710	A1	2007-11-08	Dowling	
	22	20070265984	A1	2007-11-15	Santhana	
	23	20070285280	A1	2007-12-13	Robinson et al.	
	24	20080040274	A1	2008-02-14	UZO	
	25	20080140667	A1	2008-06-12	LaBiche	
	26	20080140868	A1	2008-06-12	Kalayjian et al.	
	27	20080146148	A1	2008-06-19	Hulvey	
	28	20080167966	A1	2008-07-10	Ramsdale et al.	
	29	20080200166	A1	2008-08-21	McCamon	
	30	20080227471	A1	2008-09-18	Dankar et al.	

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	Attorney Docket Number	1348.002US6	

	31	20080306868	A1	2008-12-11	Robinson et al.	
	32	20090023474	A1	2009-01-22	Luo et al.	
	33	20090113543	A1	2009-04-30	Adams et al.	
	34	20090153367	A1	2009-06-18	Lee	
	35	20090169070	A1	2009-07-02	Fadell	
	36	20090213947	A1	2009-08-27	Rao et al.	
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	38	20100265845	A1	2010-10-21	Lampén	
	39	20110314539	A1	2011-12-22	Horton	
	40	20120214443	A1	2012-08-23	Daigle	
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	1	"Digital wallet" Wikipedia (4 pages) (Printed on July 10, 2017)						
	2	International Search Report and Written Opinion of the International Searching Authority for corresponding PCT Application No. PCT/US09/062792 (8 pages) (December 23, 2009)						
	3	U.S. PATENT AND TRADEMARK OFFICE, "Final Rejection", Application Serial No. 16/012,513, 12/11/2018, pp. 1-10						
	4	U.S. PATENT AND TRADEMARK OFFICE, "Final Rejection", Application Serial No. 16/012,513, 12/19/2019, pp. 1-14						
	5	U.S. PATENT AND TRADEMARK OFFICE, "Final Rejection", Application Serial No. 16/251,834, 12/17/2019, pp. 1-14						
	6	U.S. PATENT AND TRADEMARK OFFICE, "Notice of Allowance", Application Serial No. 16/012,513, 03/26/2020, pp. 1-12						

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Attorney Docket Number		1348.002US6	

7	U.S. PATENT AND TRADEMARK OFFICE, "Notice of Allowance", Application Serial No. 16/251,834, 04/22/2020, pp. 1-9
8	U.S. PATENT AND TRADEMARK OFFICE, "Office Action", Application Serial No. 16/012,513, 04/12/2019, pp. 1-11
9	U.S. PATENT AND TRADEMARK OFFICE, "Office Action", Application Serial No. 16/012,513, 07/31/2018, pp. 1-8
10	U.S. PATENT AND TRADEMARK OFFICE, "Office Action", Application Serial No. 16/251,834, 5/9/2019, pp. 1-10

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Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Aaron W. Pederson/	Date (YYYY-MM-DD)	2020-05-12
Name/Print	Aaron Pederson	Registration Number	58607

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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 inspections or an issued patent.
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ELECTRONIC ACKNOWLEDGEMENT RECEIPT

APPLICATION #
15/929,609

RECEIPT DATE / TIME
05/12/2020 08:35:47 PM ET

ATTORNEY DOCKET #
1348.002US6

Title of Invention

METHOD AND APPARATUS FOR SENSING PRODUCTS FOR PURCHASE

Application Information

APPLICATION TYPE Utility - Nonprovisional Application
under 35 USC 111(a)

PATENT # -

CONFIRMATION # 1207

FILED BY Sage Kruse

PATENT CENTER # 60020934

FILING DATE -

CUSTOMER # 138517

FIRST NAMED
INVENTOR Peter Karabinis

CORRESPONDENCE
ADDRESS -

AUTHORIZED BY Aaron Pederson

Documents

TOTAL DOCUMENTS: 9

DOCUMENT	PAGES	DESCRIPTION	SIZE (KB)
PowerofAttorney1348002US6.pdf	2	Power of Attorney	360 KB
Application1348002US6.pdf	27	-	269 KB
Application1348002US6-SPEC.pdf	(1-19) 19	Specification	146 KB
Application1348002US6-CLM.pdf	(20-23) 4	Claims	76 KB
Application1348002US6-ABST.pdf	(24-24) 1	Abstract	68 KB

Application1348002US6- DRW.pdf	(25-27)	3	Drawings-only black and white line drawings	117 KB
Declarations1348002US6.pdf		2	Oath or Declaration filed	1984 KB
IDSTransmittal1348002US6.p df		2	Transmittal Letter	90 KB
IDS1348002US6.pdf		10	Information Disclosure Statement (IDS) Form (SB08)	1030 KB
generatedADS60020934.pdf		6	Application Data Sheet	139 KB

Digest

DOCUMENT	MESSAGE DIGEST(SHA-512)
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ELECTRONIC PAYMENT RECEIPT

APPLICATION #
15/929,609

RECEIPT DATE / TIME
05/12/2020 08:35:47 PM ET

ATTORNEY DOCKET #
1348.002US6

Title of Invention

METHOD AND APPARATUS FOR SENSING PRODUCTS FOR PURCHASE

Application Information

APPLICATION TYPE Utility - Nonprovisional Application
under 35 USC 111(a)

PATENT # -

CONFIRMATION # 1207

FILED BY Sage Kruse

PATENT CENTER # 60020934

AUTHORIZED BY Aaron Pederson

CUSTOMER # 138517

FILING DATE -

CORRESPONDENCE ADDRESS -

FIRST NAMED INVENTOR Peter Karabinis

Payment Information

PAYMENT METHOD
DA / 502880

PAYMENT TRANSACTION ID
E20205BK37523980

PAYMENT AUTHORIZED BY
Sage Kruse

PRE-AUTHORIZED ACCOUNT
502880

PRE-AUTHORIZED CATEGORY
37 CFR 1.16 (National application filing, search, and examination fees); 37 CFR 1.17 (Patent application and reexamination processing fees); 37 CFR 1.19 (Document supply fees); 37 CFR 1.20 (Post Issuance fees); 37 CFR 1.21 (Miscellaneous fees and charges)

FEE CODE	DESCRIPTION	ITEM PRICE(\$)	QUANTITY	ITEM TOTAL(\$)
2111	UTILITY PATENT APPL. SEARCH FEE	330.00	1	330.00
4011	BASIC FILING FEE- UTILITY	75.00	1	75.00
2311	EXAMINATION OF ORIGINAL PATENT APPLICATION	380.00	1	380.00
2202	EACH CLAIM IN EXCESS OF 20	50.00	5	250.00
TOTAL				\$1,035.00

AMOUNT:

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New Applications Under 35 U.S.C. 111

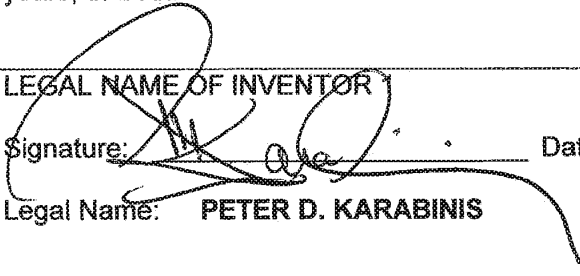
If a new application is being filed and the application includes the necessary components for filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

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.

New International Application Filed with the USPTO as a Receiving Office

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.

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)	
Title of Invention	MOBILE DEVICE MODE ENABLEMENT RESPONSIVE TO A PROXIMITY CRITERION
As a below named inventor, I hereby declare that:	
This declaration is directed to: ☐ The attached application, or ☐ United States application or PCT international application number _____ filed on _____, ☐ As amended on _____ (if applicable).	
The above-identified application was made or authorized to be made by me.	
I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.	
I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment specifically referred to above.	
I am aware of the duty to disclose information which is material to patentability as defined in 37 C.F.R. § 1.56, including for continuation-in-part applications, material information that became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.	
I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.	
LEGAL NAME OF INVENTOR	
Signature: 	Date: 7/26/2016
Legal Name: PETER D. KARABINIS	

APPLICATION DATA SHEET (37 CFR 1.76)

Title of Invention	MOBILE DEVICE MODE ENABLEMENT RESPONSIVE TO A PROXIMITY CRITERION
-----------------------	--

As a below named inventor, I hereby declare that:

This declaration
is directed to:

The attached application, or
United States application or PCT international application number
_____ filed on _____,
As amended on _____ (if applicable).

The above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment specifically referred to above.

I am aware of the duty to disclose information which is material to patentability as defined in 37 C.F.R. § 1.56, including for continuation-in-part applications, material information that became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

LEGAL NAME OF INVENTOR 2

Signature: Rajendra Singh Date: JULY 26, 2016

Legal Name: RAJENDRA SINGH

TRANSMITTAL FOR POWER OF ATTORNEY TO ONE OR MORE REGISTERED PRACTITIONERS

NOTE: This form is to be submitted with the Power of Attorney by Applicant form (PTO/AIA/82B) to identify the application to which the Power of Attorney is directed, in accordance with 37 CFR 1.5, unless the application number and filing date are identified in the Power of Attorney by Applicant form. If neither form PTO/AIA/82A nor form PTO/AIA/82B identifies the application to which the Power of Attorney is directed, the Power of Attorney will not be recognized in the application.

Application Number			
Filing Date	2020-05-12		
First Named Inventor	Peter D. Karabinis		
Title	METHOD AND APPARATUS FOR SENSING PRODUCTS FOR PURCHASE		
Art Unit			
Examiner Name			
Attorney Docket Number	1348.002US6		
SIGNATURE of Applicant or Patent Practitioner			
Signature	/Aaron W. Pederson/	Date (Optional)	2020-05-12
Name	Aaron W. Pederson	Registration Number	58607
Title (if Applicant is a juristic entity)			
Applicant Name (if Applicant is a juristic entity)			
NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4(d) for signature requirements and certifications. If more than one applicant, use multiple forms.			
☐ *Total of _____ forms are submitted.			

This collection of information is required by 37 CFR 1.131, 1.32, and 1.33. 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 1.11 and 1.14. This collection is estimated to take 3 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, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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POWER OF ATTORNEY BY APPLICANT

I hereby revoke all previous powers of attorney given in the application identified in either the attached transmittal letter or the boxes below.

Application Number	Filing Date

(Note: The boxes above may be left blank if information is provided on form PTO/AIA/82A.)

☒ I hereby appoint the Patent Practitioner(s) associated with the following Customer Number as my/our attorney(s) or agent(s), and to transact all business in the United States Patent and Trademark Office connected therewith for the application referenced in the attached transmittal letter (form PTO/AIA/82A) or identified above:

138517

OR

☐ I hereby appoint Practitioner(s) named in the attached list (form PTO/AIA/82C) as my/our attorney(s) or agent(s), and to transact all business in the United States Patent and Trademark Office connected therewith for the patent application referenced in the attached transmittal letter (form PTO/AIA/82A) or identified above. (Note: Complete form PTO/AIA/82C.)

Please recognize or change the correspondence address for the application identified in the attached transmittal letter or the boxes above to:

☒ The address associated with the above-mentioned Customer Number

OR

☐ The address associated with Customer Number:

OR

☐ Firm or
Individual Name

Address

City

State

Zip

Country

Telephone

Email

I am the Applicant (if the Applicant is a juristic entity, list the Applicant name in the box):

Telcom Ventures LLC

- ☐ Inventor or Joint Inventor (title not required below)
- ☐ Legal Representative of a Deceased or Legally Incapacitated Inventor (title not required below)
- ☒ Assignee or Person to Whom the Inventor is Under an Obligation to Assign (provide signer's title if applicant is a juristic entity)
- ☐ Person Who Otherwise Shows Sufficient Proprietary Interest (e.g., a petition under 37 CFR 1.46(b)(2) was granted in the application or is concurrently being filed with this document) (provide signer's title if applicant is a juristic entity)

SIGNATURE of Applicant for Patent

The undersigned (whose title is supplied below) is authorized to act on behalf of the applicant (e.g., where the applicant is a juristic entity).

Signature

Date (Optional)

Name

Serge G. Martin

Title

Executive Vice President - Telcom Ventures LLC

NOTE: Signature - This form must be signed by the applicant in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. If more than one applicant, use multiple forms.

☐ Total of forms are submitted.

This collection of information is required by 37 CFR 1.131, 1.32, and 1.33. 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 1.11 and 1.14. This collection is estimated to take 3 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, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

METHOD AND APPARATUS FOR SENSING PRODUCTS FOR PURCHASE

Cross-Reference to Related Application

[0001] The present application is a continuation of U.S. Application No. 16/012,513, filed June 19, 2018, which is itself a divisional of U.S. Application No. 15/800,885, filed November 1, 2017, now U.S. Patent No. 10,219,199, which is itself a continuation of U.S. Application No. 15/251,882, filed August 30, 2016, now U.S. Patent No. 9,832,708, which is itself a continuation of U.S. Application No. 12/264,711, filed November 4, 2008, now U.S. Patent No. 9,462,411. The disclosures of which are hereby incorporated herein by reference as if set forth fully herein.

Field of the Invention

[0002] This invention relates to systems, devices and/or methods that may be used to provide an adaptive enablement of one or more communications modes based upon having satisfied a proximity criterion. The one or more communications modes may be one or more wireless and/or non-wireless communications modes.

Background of the Invention

[0003] Adaptivity and mobility aspects of wireless communications are becoming more important in people's lives. People are relying more and more on mobile wireless devices to perform an ever-increasing suite of functions such as, for example, navigation, e-mail, web surfing, streaming video, etc. However, there is a rigidity aspect that is associated with wireless mobile devices in that a wireless mobile device is typically configured to be capable of performing a predetermined number of functions independent of its location, Time-of-Day (ToD), velocity, acceleration, temperature, sensing of a signal, etc. It would, for example, be desirable to have a mobile wireless device act as a "wallet" (over and above other functions) only when it is time to pay for an item and not act as a wallet when there is no need to do so.

[0004] The present invention, addresses these limitations (i.e., the rigidity) of current wireless mobile devices. Accordingly, embodiments of the present invention provide systems, devices and/or methods that may be used to enable adaptively one or more modes/functions of a device based upon having satisfied by the device (or another device) a proximity condition/criterion.

[0005] As used herein, the term “end-user device,” “wireless mobile device,” “mobile wireless device” or simply “device” includes any electronic device that may be used to transmit/receive information wirelessly and/or non-wirelessly such as, for example, a Digital Subscriber Line (DSL) modem/transceiver; a cable modem/transceiver; a cellular and/or satellite radiotelephone with or without a multi-line display; Personal Communications System (PCS) terminals that may combine a radiotelephone with data processing, facsimile and/or data communications capabilities; Personal Digital Assistants (PDA) that can include a radio frequency transceiver and/or a pager, Internet/Intranet access, Web browser, organizer, calendar and/or a global positioning system (GPS) receiver; laptop and/or palmtop computers or other appliances, which may (or may not) include a radio frequency transceiver.

[0006] An end-user device also may be referred to herein as a radiotelephone, radioterminal, mobile terminal, user device, wireless device, device and/or terminal; etc. As used herein, the term end-user device and/or any of its synonyms also include(s) any other radiating device/equipment/source that may have time-varying or fixed geographic coordinates and/or may be portable, transportable, installed in a vehicle (aeronautical, maritime, or land-based) and/or situated and/or configured to operate locally and/or in a distributed fashion over one or more terrestrial and/or extra-terrestrial location(s).

Brief Description of the Drawings

[0007] FIG. 1 depicts a communication system that detects a proximity criterion in accordance with the claimed embodiments;

[0008] FIG. 2 depicts another communication system that detects a proximity criterion in accordance with the claimed embodiments;

[0009] FIG. 3 is a flow chart illustrating a method of detecting proximity criterion and enabling functions or modes on devices in accordance with the claimed embodiments.

Detailed Description

[00010] The present invention now will be described more fully hereinafter with reference to specific embodiments and/or the accompanying drawing(s), in which embodiments of the invention are shown. This invention may, however, be embodied in many different forms and should not be construed as limited to the embodiments set forth herein. Rather, these embodiments are provided so that this disclosure will be thorough and complete, and will fully convey the scope of the invention to those skilled in the art.

[00011] It will be understood that when an element is referred to as being "connected," "coupled" and/or "responsive" to another element, it can be directly connected, coupled and/or responsive to the other element or intervening elements may be present. Furthermore, "connected," "coupled" and/or "responsive" as used herein may include wirelessly connected, coupled and/or responsive. The terminology used herein is for the purpose of describing particular embodiments only and is not intended to be limiting of the invention. As used herein, the singular forms "a," "an" and/or "the" are intended to include the plural forms as well, unless expressly stated otherwise. It will be further understood that the terms "includes," "comprises," "including" and/or "comprising," when used in this specification, specify the presence of stated features, integers, steps, operations, elements, and/or components, but do not preclude the presence and/or addition of one or more other features, integers, steps, operations, elements, components, and/or groups thereof.

[00012] Unless otherwise defined, all terms (including technical and scientific terms) used herein have the same meaning as commonly understood by one of ordinary skill in the art to which this invention belongs. It will be further understood that terms, such as those defined in commonly used dictionaries, should be interpreted as having a meaning that is consistent with their meaning in the context of the

relevant art and the present disclosure, and will not be interpreted in an idealized or overly formal sense unless expressly so defined herein.

[00013] Furthermore, it will be understood that although terms such as, for example, first and second may be used herein to describe various elements, these elements should not be limited by these terms. These terms are only used to distinguish one element from another element. Thus, a first element below could be termed a second element, and similarly, a second element may be termed a first element without departing from the teachings of the present invention. As used herein, the term "and/or" includes any and all combinations of one or more of the associated listed items. The symbol "/" is also used as a shorthand notation for "and/or."

[00014] A mobile device such as, for example, a wireless communications device (e.g., a wireless terminal, a wireless/mobile phone, a Personal Digital Assistant (PDA), a smart phone, a multi-media device including Global Positioning System (GPS) capability, etc.) and/or one or more systems that is/are providing service to the mobile device and/or to a device other than the mobile device, may be configured to enable one or more modes/functions of the mobile device and/or of the device other than the mobile device, responsive to a proximity criterion having been satisfied.

[00015] In some embodiments, determining whether the proximity criterion is satisfied comprises determining by the mobile device and/or by the one or more systems of a location associated with the mobile device. In other embodiments, determining whether the proximity criterion is satisfied comprises determining by the device other than the mobile device and/or by the one or more systems of a location that is associated with the device other than the mobile device. The determining by the mobile device, by the device other than the mobile device and/or by the one or more systems may, in some embodiments, comprise reception and/or processing of GPS signals in order to determine a Time-of-Day (ToD), Time-of-Month (ToM), Time-of-Year (ToY), velocity, acceleration and/or position (in three-dimensional space). In other embodiments, the determining may be based upon the mobile device and/or the device other than the mobile device detecting a signal that is being radiated by a device that is attached to and/or is installed in/on an entity (i.e., a device that is

associated with the entity). In still further embodiments, the device other than the mobile device may send a message to the mobile device requesting enablement of one or more modes/functions of the mobile device and/or of the device other than the mobile device and, responsive to an affirmative response by the mobile device, the mobile device and/or the device other than the mobile device may enable the one or more modes/functions of the mobile device and/or of the device other than the mobile device.

[00016] The entity may, for example, be a person, an animal, a vehicle (ground-based, maritime and/or aeronautical), a building (residential, commercial and/or office), a product that is for sale, a store that sells one or more products, a check-out counter in a store, a shopping cart that may be used by a customer to carry one or more products selected by the customer for purchase, one or more locations in time and/or space, a geographic area and/or a multi-dimensional region in time and/or space.

[00017] The signal that is being radiated by the device that is attached to and/or is installed in the entity may include an element that may be *a priori* known by the mobile device and/or by the device other than the mobile device. As such, according to some embodiments, the mobile device and/or the device other than the mobile device may, when proximate to the entity, receive the signal that is being radiated by the device that is attached to and/or is installed in the entity, detect the element that may be *a priori* known by the mobile device and/or by the device other than the mobile device and thus determine that the mobile device and/or the device other than the mobile device is proximate to the entity.

[00018] It will be understood that the signal that is being radiated by the device that is attached to and/or is installed in the entity may be radiated at a relatively low power level so that it may be detected by the mobile device and/or by the device other than the mobile device only over a relatively small distance between, for example, the mobile device and the device that is attached to and/or is installed in the entity (e.g., over a distance that is, for example, less than 100 meters, in some embodiments or less than 10 meters, in other embodiments). It will also be understood that the element that may be *a priori* known by the mobile device and/or by the device other

than the mobile device may comprise an identity associated with the entity. In some embodiments, the identity may comprise a number, a word/name, a location, a Time-of-Day (ToD), a unique code, a region of space and/or time, etc.

[00019] According to some embodiments, the mobile device and/or the device other than the mobile device may be configured so that a user of the mobile device and/or a user of the device other than the mobile device, a service provider providing service to the mobile device and/or providing service to the device other than the mobile device and/or a manufacturer of the mobile device and/or the device other than the mobile device may program the mobile device and/or the device other than the mobile device to recognize the element and/or the identity associated with the entity.

[00020] A number of examples/applications of the concepts disclosed above will now be described to further illustrate the scope and spirit of the present invention to those skilled in the art.

[00021] Example/Application No. 1: A motor vehicle, such as, for example, a car, may be configured with a low-power radiator that radiates a signal that includes an identity of the motor vehicle, a velocity of the motor vehicle, an acceleration of the motor vehicle, a position of the motor vehicle, a Time-of-Day (ToD), a Time-of-Month (ToM), a Time-of-Year (ToY) and/or an indication of a content of the motor vehicle. Now imagine a person who is associated with the motor vehicle (e.g., an owner/driver of the motor vehicle) is approaching the motor vehicle. Let us assume that the person who is approaching the motor vehicle and is associated with the motor vehicle carries a wireless communications device. The wireless communications device may be configured to sense the signal that is being radiated by the low-power radiator, detect the identity of the motor vehicle and compare the detected identity with one or more *a priori* identities that are stored in the wireless communications device. If a match is found, the communications device may be configured to selectively enable, responsive to the match, for example, a “pay toll” function. Accordingly, as the motor vehicle approaches an access point that is configured to radiate a signal associated with toll collection, the communications device, responsive to having detected the signal associated with toll collection, may be configured to

transmit information that may be used by the access point and/or by an associated toll collection system that may be connected to the access point to debit an account that is associated with a user and/or owner of the communications device. In further embodiments of the present invention, if the match is found, the communications device may be configured to selectively enable, responsive to the match and responsive to a velocity of the motor vehicle, an acceleration of the motor vehicle, a position of the motor vehicle, a Time-of-Day (ToD), a Time-of-Month (ToM), a Time-of-Year (ToY) and/or a content of the motor vehicle, for example, the “pay toll” function. It will be understood that the velocity of the motor vehicle, the acceleration of the motor vehicle, the position of the motor vehicle, the ToD, the ToM and/or the ToY may be provided by the communications device (based on GPS signal processing, and/or based on any other means, that may be performed/implemented by the communications device and/or by a network that may be providing service to the communications device) and/or by the motor vehicle.

[00022] The wireless communications device may be configured to keep the pay toll function enabled for as long as the wireless communications device is able to sense the signal that is being radiated by the low-power radiator (i.e., the signal that includes an identity of the motor vehicle) and to selectively disable the pay toll function a short time after the wireless communications device is no longer able to sense the signal that is being radiated by the low-power radiator. In further embodiments, the wireless communications device may be configured to keep the pay toll function enabled as long as the wireless communications device is able to sense the signal that is being radiated by the low-power radiator and a specific value (or values) associated with at least one of a velocity of the motor vehicle, an acceleration of the motor vehicle, a position of the motor vehicle, a ToD, a ToM, a ToY and a content of the motor vehicle is/are being met/satisfied.

[00023] In accordance with some embodiments, even though the wireless communications device does not find a match but is able to sense the signal that is being radiated by the low-power radiator, the wireless communications device may be configured to provide a notification (e.g., a sound, a vibration, a light and/or an alpha-numeric display, etc.). Responsive to the notification, a user of the wireless

communications device may instruct (for example, manually or via voice command) the wireless communications device to enable the pay toll function.

[00024] In further embodiments, a second wireless communications device that belongs to and/or is being used by a second person, senses a signal and, responsive to having sensed the signal (whether a match is found or not) sends a request selectively to a first wireless communications device. Responsive to the request, the first wireless communications device sends an acknowledgement and/or an authorization to the second wireless communications device. Responsive to the acknowledgement and/or authorization the second wireless communications device selectively enables a mode which, according to some embodiments, is the pay toll function. It will be understood that the first and second wireless communications devices may, according to some embodiments, be predetermined to function as described above. That is, the first wireless communications device acting as a “master” and the second wireless communications device acting as a “slave” in that the second wireless communications device is configured to enable a mode/function thereof responsive to a detection/match and responsive to receiving an authorization from the first wireless communications device. If the mode/function comprises paying for a transaction, an amount of money associated with the paying may be deducted/withdrawn from an account associated with an owner/user of the first wireless communications device.

[00025] Thus, according to some embodiments, the first wireless communications device functions independently and/or autonomously whereas the second wireless communications device functions dependently on the first wireless communications device, at least as far as at least one of its modes/functions is concerned. The master-slave relationship between the first and second wireless communications devices may, according to some embodiments, be predetermined. In other embodiments, the master-slave relationship may not be predetermined and may be negotiated and/or established, as a need for such a relationship arises, by exchanging information between the first and second wireless communications devices. It will be understood that, in some embodiments, at least one of the first and second wireless communications devices may not be a wireless communications device.

[00026] Example/Application No. 2: A wireless communications device may be configured to estimate a location associated therewith and may also be configured to estimate a value of at least one other parameter that may be associated with the wireless communications device, an environment thereof and/or an entity (living or otherwise) that is associated with and/or is proximate to the wireless communications device. The “at least one other parameter” may, for example, be a velocity, acceleration, ToD, ToM, ToY, humidity, temperature, height, level of brightness, level of darkness, a blood pressure, a heart rate, a blood content, a physiological state, a psychological state, etc. As those skilled in the art will appreciate, the wireless communications device may be configured to estimate its location and the value of the “at least one other parameter” by, for example, processing GPS signals and/or by using other means and/or sensors that may, according to some embodiments, be device-based and/or network assisted/based means and/or sensors.

[00027] According to some embodiments, the wireless communications device may be configured to make a comparison between an estimate of its location and one or more other locations, that may be one or more other predetermined and/or pre-stored locations, and the wireless communications device may be configured to selectively enable a first communications mode/function responsive to an outcome of the comparison and/or to selectively disable a second communications mode/function responsive to the outcome of the comparison. In other embodiments, the wireless communications device may be configured to selectively enable the first communications mode/function responsive to the outcome of the comparison and/or responsive to a value of another parameter, such as, for example, a value associated with the “at least one other parameter” list and/or selectively disable the second communications mode/function responsive to the outcome of the comparison and/or responsive to a value of another parameter, such as, for example, a value associated with the “at least one other parameter” list.

[00028] For example, in some embodiments, if a comparison between an estimate of location of the wireless communications device and the one or more locations that are predetermined and/or pre-stored reveals a distance therebetween that is less than or equal to a threshold, the wireless communications device may be configured to

selectively and/or preferentially enable a first communications mode, that may be one communications mode of a plurality of communications modes, that uses, for example, a first air interface protocol and a first set of frequencies to communicate information wirelessly (wherein the first set of frequencies may be a predetermined first set of frequencies), while refraining from using (and/or using only infrequently and/or as a last resort depending on an emergency, need and/or a priority) a second communications mode, of the plurality of communications modes, comprising a second set of frequencies and/or a second air interface protocol. In some embodiments, refraining from using (and/or using only infrequently and/or as a last resort depending on an emergency, need and/or a priority) a second communications mode comprises selectively and/or preferentially disabling the second communications mode that uses, for example, the second air interface protocol and/or the second set of frequencies. It will be understood that, according to some embodiments, the first and/or second air interface protocols may be predetermined and that the first and/or second set of frequencies may also be predetermined. In further embodiments, at least one of the first air interface protocol, the second air interface protocol, the first set of frequencies and the second set of frequencies may not be predetermined and may be determined as required responsive to receiving a message, sensing/detecting at least a portion of an electro-magnet spectrum and/or via other means such as, for example, a user choice/preference/command.

[00029] In some embodiments, the first communications mode may comprise an air interface protocol, such as, for example, an Orthogonal Frequency Division Multiplexed and/or an Orthogonal Frequency Division Multiple Access (OFDM/OFDMA) protocol, a WiFi- and/or WiMAX-based air interface protocol that may be based upon Time Division Duplex (TDD) operation wherein a common set of frequencies are used bi-directionally (at different times) to provide uplink and downlink communications, and the first and/or second set of frequencies may comprise, for example, an un-licensed use and/or a licensed use set of frequencies.

[00030] In further embodiments, the wireless communications device may further be configured to selectively enable (or to prefer) a first communications mode and/or to selectively refrain from using (or avoid from using unless a level of priority and/or

other reason is provided) a second communications mode, responsive to the comparison of position that was discussed earlier and/or responsive to a value of a quantity/parameter, such as, for example, a value associated with the “at least one other parameter” and/or responsive to an event (man-caused or natural). The first communications mode may comprise a first air interface protocol and a first set of frequencies for transmission/reception of information and the second communications mode may comprise a second air interface protocol, that may be different from the first air interface protocol, and/or a second set of frequencies for transmission and/or reception of information that may be different (or at least partially different) from the first set of frequencies.

[00031] The wireless communications device may be configured to repeatedly make a decision based on the comparison of position that was discussed earlier, based on the value of a quantity/parameter, such as, for example, a value associated with the “at least one other parameter” and/or based on the event (man-caused and/or natural), to maintain the first communications mode enabled and/or to maintain the second communications mode disabled for as long as the comparison of position, the value of the quantity/parameter and/or the event (man-caused and/or natural) continues to satisfy a threshold criterion and to disable the first communications mode and/or enable the second communications mode after the wireless communications device determines that the comparison of position, the value of the quantity/parameter and/or the event no longer satisfies the threshold criterion.

[00032] In further embodiments, responsive to the comparison of position, the value of the quantity/parameter and/or the event satisfying the threshold criterion, the wireless communications device may be configured to send information (automatically or upon user command) selectively to one or more other devices that, according to some embodiments, may be predetermined other devices. In still other embodiments, responsive to the comparison of position, the value of the quantity/parameter and/or the event satisfying the threshold criterion, the wireless communications device may be configured to receive information (automatically or upon user command) selectively from one or more other devices that, according to some embodiments, may be predetermined other devices.

[00033] **Example/Application No. 3:** A shopping cart, for example, of the type used in a grocery and/or super-market store, may be configured to sense/detect one or more items that are placed in the shopping cart. As used herein, the term “configured to sense/detect” may, in some embodiments, comprise sensing/detecting, for example, a weight, a manufacturer, an expiration date, a price and/or a nutritional value, etc. associated with the one or more items, wherein the sensing/detecting may be performed based upon any technology, such as, for example, a Radio Frequency (RF) tagging technology, a bar-code technology, an image recognition technology and/or any other technology.

[00034] Each shopping cart may include an identity (e.g., a number). Mr. Jones (a customer), who chooses a shopping cart having as identity a number such as, for example, “8787,” may insert the number 8787 into a wireless communications device that Mr. Jones is carrying/using. Upon inserting the number 8787 into the wireless communications device, the wireless communications device may be configured to selectively establish a communications link, that may, in some embodiments, be a short-range communications link, with the shopping cart having identity 8787. From that time on, as the shopping cart senses/detects the one or more items that are placed in the shopping cart, information associated with the sensing/detecting of the one or more items, including price information associated with the one or more items, is transferred to Mr. Jones’ wireless communications device via the communications link that is selectively established between Mr. Jones’ wireless communications device and shopping cart 8787.

[00035] In the event that Mr. Jones decides to put back on a shelf an item that has been placed in shopping cart 8787, that item is sensed/detected by the shopping cart as having been withdrawn/deleted from the shopping cart and at least some information associated therewith is withdrawn/deleted, or at least changed, from Mr. Jones’ wireless communications device via one or more commands/messages sent to the wireless communications device by the shopping cart, via the communications link.

[00036] When Mr. Jones has finished shopping, Mr. Jones can examine the wireless communications device and may instruct the wireless communications

device to perform a transaction, such as, for example, to pay for the one or more items that Mr. Jones has placed in shopping cart 8787. In some embodiments, the shopping cart including the one or more items and the wireless communications device may need to be proximate to a specific location within the grocery and/or super market store (e.g., proximate to a “check-out” counter/location) before the wireless communications device and/or shopping cart (individually and/or jointly in communication therebetween) may enable a “pay” function by detecting a (short-range) signal that may be transmitted by/from the specific location.

[00037] Other Embodiments: Figures 1 and 2 illustrate further embodiments of the present invention. Additional embodiments may comprise systems and/or methods. For example, in one embodiment as illustrated in FIG. 1, a method in a system 10 is provided comprising: detecting that a proximity criterion is satisfied between a first device 14, such as a mobile subscriber device, and Entity 1; and enabling a mode of the first device and/or a mode of a second device 15 responsive to the detecting; where, according to some embodiments, the second device 15 is not the Entity 1 and is not associated with the Entity 1 and wherein the Entity 1 is not involved in providing a communications service to the first and/or second device. In one particular embodiment, a mobile subscriber device 14 linked to a communications system 18 via base station 12 can enable a function when the device 14 comes within a proximity of Entity 1. The function enabled can be any number of functions at the mobile subscriber device 14 or even at the mobile subscriber device 15. The mobile subscriber device 15 can also be linked to the communications system 18 via a base station 13. The function enabled can be a financial transaction, the transmission of communications, such as data, and/or some other function that may provision the mobile subscriber device 14 and/or the mobile subscriber device 15 with additional functionality not previously available/activated at the respective devices.

[00038] In one embodiment, the detection by mobile subscriber device 14 of a proximity criterion relative to Entity 1 can enable the mobile subscriber device 14 to authorize and complete a financial transaction such as the payment of a toll and/or of an item at a check out line. The same detection by mobile subscriber device 14 of the

proximity criterion relative to Entity 1 can also or alternatively enable the mobile subscriber device 15 to authorize and complete a financial transaction such as the payment of a toll and/or a payment for an item at a check out line. The enablement of the mobile subscriber device 15 may also be contingent on the mobile subscriber device 15 having satisfied a proximity criterion relative to a second entity, such as Entity 2. Thus, the proximity criterion can include various requirements depending on the particular application. The requirements may include at least one of having the device 14 being within a predetermined distance of Entity 1, the device 14 receiving a predetermined signal strength from Entity 1, being at such predetermined distance for a predetermined time interval and receiving a predetermined signal strength during the predetermined time interval. The requirements can also include having device 15 being within a predetermined distance and/or predetermined signal strength of Entity 2, and/or being within such predetermined distance and/or signal strength during a predetermined time interval. It will be understood that at least one of devices 16 and 17, shown in FIG. 1 as being attached to Entity 1 and Entity 2, respectively, may, according to some embodiments, comprise a wireless transmitter and/or receiver.

[00039] According to some embodiments, the detecting may be performed by the first device (i.e., radioterminal 14), by the second device (i.e., radioterminal 15), by a device that is associated with an entity (i.e., device 16 and/or device 17) and/or by a system that is associated with the first and/or second devices (i.e., system 18, base station 12 and/or base station 13). Also, in some embodiments, the enabling may be performed by the first device, by the second device, by a device that is associated with the entity and/or by a system that is associated with the first and/or second devices.

[00040] In some embodiments, the first device comprises a wireless communications device, the second device comprises a wireless communications device and/or the system that is associated with the first and/or second devices comprises a wireless communications system that is configured to provide a communications service to the first and/or second devices.

[00041] In further embodiments, detecting comprises: using position information associated with the first device; using position information associated with the second

device; detecting a signal (and/or a signal strength measurement such as RSSI) that is being radiated by the first device; detecting a signal (and/or a signal strength) that is being radiated by the second device; and/or detecting a signal (and/or a signal strength) that is being radiated by a device that is associated with the entity, wherein using position information may, according to some embodiments, comprise: evaluating a distance between the position information and one or more position values; and determining whether the distance is less than or equal to a threshold. In some embodiments, the one or more position values is/are predetermined.

[00042] In further embodiments, responsive to the enabling, the method comprises performing a function; wherein the function, according to some embodiments, comprises a financial transaction, receiving data and/or transmitting data. In some embodiments, receiving data comprises receiving data selectively from a first unit and wherein transmitting data comprises transmitting data selectively to a second unit. In some embodiments, the first and second units are the same unit, whereas in other embodiments the first and second units are different units. In further embodiments, the first and/or second units may be predetermined units and the first unit may comprise a wireless communications device and/or the second unit may comprise a wireless communications device. In yet further embodiments, the first unit may be associated with an Internet Protocol (IP) address and/or the second unit may be associated with an IP address.

[00043] Referring to FIG. 2, the first device 14 can traverse a path 23 within an overall coverage area 20 and the second device 15 can traverse a path 25 within the overall coverage area 20. The overall coverage area 20 can include areas 22 and 24 that can be associated with respective entities. The entry of the first device 14 within area 22 can selectively enable a mode and/or a function at device 14 and can optionally enable a mode and/or a function at device 15 based, according to some embodiments, on a proximity criterion to area 24. For example, if device 14 owned and/or operated by a user is at a first store within area 22 and the device 15 owned/operated by, for example, the user's spouse is at a second store within area 24, then the user's spouse at device 15 can complete a purchase within area 24 based on the user's presence with device 14 within area 22. Similarly, if the two users at

devices 14 and 15 at respective areas 22 and 24 want to sample music, games and/or even play a game between each other, their respective device can be provisioned for such sampling as long as they stay within the proximity criteria set for each of the respective devices. Once one or the other device goes beyond the respective proximity criterion, the mode and/or function enabling the sampling will be disabled at one or both devices.

[00044] In some embodiments according to the present invention, receiving data comprises receiving a position, a request and/or an acknowledgement and wherein transmitting data comprises transmitting a position, an authorization and/or an acknowledgement.

[00045] In further embodiments according to the present invention, the financial transaction comprises providing payment associated with a toll and/or providing payment associated with a purchase of one or more items.

[00046] In accordance with additional embodiments of the present invention, receiving data comprises receiving data once or repeatedly and transmitting data comprises transmitting data once or repeatedly.

[00047] It will be understood that relative to any one of the plurality of methods described above, the term “entity” may comprise a person, an animal, a building, a motor vehicle, a shopping cart, a product, a check-out counter, a geographic position, a geographic area and/or one or more locations in time and/or space.

[00048] In a further embodiment according to the present invention, a system is provided comprising: a detector that is configured to enable a mode of a first device and/or to enable a mode of a second device responsive to a detection that a proximity criterion is satisfied between the first device and an entity; wherein, according to some embodiments, the second device is not the entity and is not associated with the entity, and wherein, according to further embodiments, the entity is not involved in providing a communications service to the first and/or second device. In some embodiments, the detector is included in, and the detection is performed by, the first device, the second device, a device that is associated with the entity and/or a system that is associated with the first and/or second devices. Similarly, according to some embodiments, the detector is included in, and the mode is enabled by, the first device,

the second device, a device that is associated with the entity and/or a system that is associated with the first and/or second devices.

[00049] Referring to FIG. 3, a flow chart illustrating a method 30 in accordance with an embodiment herein includes detecting that a proximity criterion is satisfied between a first device and an entity at 32. Note, that although the steps described are in a certain order in this embodiment, embodiments contemplated within the scope of the claims are not necessarily limited to a particular order or necessarily include every step described in method 30 and may further include additional steps as may be obvious to one of ordinary skill in the art. Method 30 can further include enabling a mode of the first device and/or a mode of a second device responsive to detecting satisfaction of the proximity criterion and while the proximity criterion is satisfied at 34, where the first device and the second device form a part of a communication system providing communications service to the first device and the second device. The second device can be independent of the entity and the entity can be independent of the communications service provided to the first and second device as shown at 36. The method at 38 can enable a mode of the first device and a mode of the second device responsive to detecting that the proximity criterion is satisfied between the first device and the entity. The first device and the second device can be mobile subscriber devices (i.e., radioterminals) and the entity can be a proximity beacon enabling a financial transaction between the first device or the second device and a vendor in communication with the first device or the second device at an access point maintained by the vendor or on behalf of the vendor. The access point can be a toll booth, a point of purchase counter, or a check out counter and the first device and the second device can be cellular phones authorized selectively by its user and by satisfying the proximity criterion to proceed with a financial transaction associated with the vendor at the access point. As previously noted, although cellular phones are described, other communication devices are certainly within contemplation of the scope of the claims. The step of detecting can be done in any number of various ways. Detecting can include using position information associated with the first device relative to the entity or using position information of the second device relative to the entity or detecting a signal being radiated by the entity or detecting a

signal being radiating by the first device and reflected by the entity or detecting a signal being radiating by the second device and reflected by the entity. In this regard, the method 30 can further evaluate a distance between the position information and one or more position values and determine whether the distance is less than or equal to a threshold at 39.

[00050] In some embodiments, the first device comprises a wireless communications device and/or the second device comprises a wireless communications device and the system that is associated with the first and/or second devices comprises a wireless communications system.

[00051] In further embodiments, the detection comprises: use of position information associated with the first device; use of position information associated with the second device; a detection of a signal that is being radiated by the first device; a detection of a signal that is being radiated by the second device; and/or a detection of a signal that is being radiated by a device that is associated with the entity. In some embodiments, use of position information comprises: an evaluation of a distance between the position information and one or more position values; and a determination of whether the distance is less than or equal to a threshold. It will be understood, that according to some embodiments of the invention, the one or more position values may be predetermined position values.

[00052] In yet additional embodiments of the present invention, the first device and/or the second device may be configured to perform a function responsive to the mode having been enabled by the detector, wherein, according to some embodiments, the function may comprise a financial transaction, reception of data and/or transmission of data. In some embodiments, reception of data comprises reception of data selectively from a first unit and transmission of data comprises transmission of data selectively to a second unit. In accordance with some embodiments, the first and second units are the same unit and in accordance with other embodiments, the first and second units are different units. It will be understood that in some embodiments the first and/or second units may be first and second predetermined units.

[00053] In yet further embodiments of the invention, the first unit may comprise a wireless communications device and/or the second unit may comprise a wireless

communications device. According to additional embodiments, the first unit is associated with an Internet Protocol (IP) address and/or the second unit is associated with an IP address.

[00054] In some embodiments of the present invention, receiving data comprises receiving a position, a request and/or an acknowledgement and wherein transmitting data comprises transmitting a position, an authorization and/or an acknowledgement. According to other embodiments, the financial transaction comprises a payment of a toll and/or a payment associated with a purchase of one or more items. It will be understood that, in some embodiments, the reception of data comprises reception of data once or repeatedly and that, according to some embodiments, the transmission of data comprises transmission of data once or repeatedly. It will also be understood that according with any one of the embodiments described above (or any combination thereof) the term “entity,” as used therein may comprise a person, an animal, a building, a motor vehicle, a shopping cart, a product that is on sale, a check-out counter, a geographic position, a geographic area and/or one or more locations in time and/or space.

[00055] In some embodiments according to the present invention, a system may comprise the detector, the first device, the second device, the entity, the device that is associated with the entity and/or the system that is associated with the first and/or second devices.

[00056] In the specification, there have been disclosed embodiments and, although specific terms are employed, they are used in a generic and descriptive sense only and not for purposes of limitation. The following claims are provided to set forth, at least in part, the scope of the present invention.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. :
Applicant : Telcom Ventures, LLC
Filed : May 12, 2020
Art Unit :
Examiner :
Confirmation No.:
Docket No. : 1348.002US6
Customer No. : 138517
Title : METHOD AND APPARATUS FOR SENSING PRODUCTS FOR
PURCHASE

INFORMATION DISCLOSURE STATEMENT (IDS)

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Commissioner:

Pursuant to 37 C.F.R. § 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is filed within three months of the filing date of the present application (37 C.F.R. § 1.97(b)(1)).

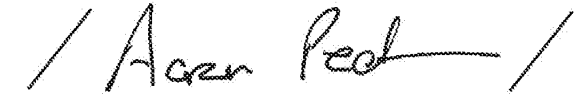
In accordance with 37 C.F.R. § 1.98(a)(2)(ii), Applicant has not submitted copies of U.S. patents and U.S. patent applications. In accordance with 37 C.F.R. §1.98(a)(2) and §1.98(d), a copy of each foreign patent and/or a copy of each publication, other than U.S. patents and U.S. patent application publications has been provided only for those items listed on the enclosed Form PTO/SB/08 that have not previously been cited by or submitted to the U.S. Patent and Trademark Office in parent application nos., 16/012,513, filed June 19, 2018, 15/800,885, filed November 1, 2017, 15/251,882, filed August 30, 2016, and 12/264,711, filed November 4, 2008.

It is submitted that the Information Disclosure Statement is in compliance with 37 C.F.R. § 1.98 and the Examiner is respectfully requested to consider the listed references.

Customer No. 138517

Respectfully submitted,

Date: May 12, 2020

A handwritten signature in black ink, appearing to read "Aaron Pederson", is written over a horizontal line.

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Date Mailed: 05/19/2020

Receipt is acknowledged of this non-provisional utility patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF FIRST INVENTOR, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection.

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which is a CON of 15/251,882 08/30/2016 PAT 9832708
which is a CON of 12/264,711 11/04/2008 PAT 9462411

Foreign Applications for which priority is claimed (You may be eligible to benefit from the **Patent Prosecution Highway** program at the USPTO. Please see <http://www.uspto.gov> for more information.) - None.

Foreign application information must be provided in an Application Data Sheet in order to constitute a claim to foreign priority. See 37 CFR 1.55 and 1.76.

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Permission to Access Search Results: Yes

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The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 15/929,609**

Projected Publication Date: 08/27/2020

Non-Publication Request: No

Early Publication Request: No

**** SMALL ENTITY ****

Title

METHOD AND APPARATUS FOR SENSING PRODUCTS FOR PURCHASE

Preliminary Class

710

Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications: No

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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875						Application or Docket Number 15/929,609			
APPLICATION AS FILED - PART I									
(Column 1)		(Column 2)		SMALL ENTITY		OR OTHER THAN SMALL ENTITY			
FOR	NUMBER FILED	NUMBER EXTRA		RATE(\$)	FEE(\$)	RATE(\$)	FEE(\$)		
BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A		N/A	75	N/A			
SEARCH FEE (37 CFR 1.16(k), (l), or (m))	N/A	N/A		N/A	330	N/A			
EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A		N/A	380	N/A			
TOTAL CLAIMS (37 CFR 1.16(i))	25	minus 20 =	*	5					
INDEPENDENT CLAIMS (37 CFR 1.16(h))	3	minus 3 =	*						
APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).				0.00				
MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))					0.00				
* If the difference in column 1 is less than zero, enter "0" in column 2.				TOTAL	1035	TOTAL			
APPLICATION AS AMENDED - PART II									
(Column 1)		(Column 2)		(Column 3)		SMALL ENTITY		OR OTHER THAN SMALL ENTITY	
AMENDMENT A	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		RATE(\$)	ADDITIONAL FEE(\$)	RATE(\$)	ADDITIONAL FEE(\$)	
	Total (37 CFR 1.16(i))	*	Minus	**	=		x	=	
	Independent (37 CFR 1.16(h))	*	Minus	***	=		x	=	
	Application Size Fee (37 CFR 1.16(s))								
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))								
					TOTAL ADD'L FEE		TOTAL ADD'L FEE		
AMENDMENT B	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		RATE(\$)	ADDITIONAL FEE(\$)	RATE(\$)	ADDITIONAL FEE(\$)	
	Total (37 CFR 1.16(i))	*	Minus	**	=		x	=	
	Independent (37 CFR 1.16(h))	*	Minus	***	=		x	=	
	Application Size Fee (37 CFR 1.16(s))								
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))								
					TOTAL ADD'L FEE		TOTAL ADD'L FEE		
* If the entry in column 1 is less than the entry in column 2, write "0" in column 3. ** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20". *** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3". The "Highest Number Previously Paid For" (Total or Independent) is the highest found in the appropriate box in column 1.									



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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
15/929,609	05/12/2020	Peter D. Karabinis	1348.002US6

CONFIRMATION NO. 1207

PUBLICATION NOTICE



OC000000119531545

138517

Carlson, Caspers, Vandenburg & Lindquist, P.A.
225 S. Sixth St.
Ste. 4200
Minneapolis, MN 55402

Title:METHOD AND APPARATUS FOR SENSING PRODUCTS FOR PURCHASE

Publication No.US-2020-0275345-A1

Publication Date:08/27/2020

NOTICE OF PUBLICATION OF APPLICATION

The above-identified application will be electronically published as a patent application publication pursuant to 37 CFR 1.211, et seq. The patent application publication number and publication date are set forth above.

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Notice of References Cited	Application/Control No. 15/929,609		Applicant(s)/Patent Under Reexamination Karabinis et al.	
	Examiner MICHAEL T VU		Art Unit 2641	Page 1 of 1

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*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
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*	B	US-7624923-B2	12-2009	Clark; Todd C.	G06Q30/02	235/375
	C					
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	Q					
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*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
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*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.

Doc code: IDS

PTO/SB/08a (02-18)

Doc description: Information Disclosure Statement (IDS) Filed

Approved for use through 11/30/2020. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number	
	Filing Date	2020-05-12
	First Named Inventor	Peter D. Karabinis
	Art Unit	
	Examiner Name	
	Attorney Docket Number	1348.002US6

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Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear
	1	6595929	B2	2003-07-22	Stivoric et al.	
	2	6769607	B1	2004-08-03	Pitroda et al.	
	3	6944981	B1	2005-09-20	Garberg et al.	
	4	6957107	B2	2005-10-18	Rogers et al.	
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STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number		
Filing Date		2020-05-12
First Named Inventor	Peter D. Karabinis	
Art Unit		
Examiner Name		
Attorney Docket Number		1348.002US6

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10	7780081	B1	2010-08-24	Liang	
11	7822644	B2	2010-10-26	Alberth Jr. et al.	
12	7912629	B2	2011-03-22	Sutter et al.	
13	8023580	B2	2011-09-20	Bremer	
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17	8532069	B2	2013-09-10	Balwani	
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Examiner Name		
Attorney Docket Number		1348.002US6

	20	RE39736		2007-07-17	Morrill Jr.	
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	1	20030220105	A1	2003-11-27	Daigremont et al.	
	2	20040030601	A1	2004-02-12	Pond et al.	
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	Examiner Name		
	Attorney Docket Number		1348.002US6

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	Examiner Name		
	Attorney Docket Number		1348.002US6

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	1	"Digital wallet" Wikipedia (4 pages) (Printed on July 10, 2017)	
	2	International Search Report and Written Opinion of the International Searching Authority for corresponding PCT Application No. PCT/US09/062792 (8 pages) (December 23, 2009)	
	3	U.S. PATENT AND TRADEMARK OFFICE, "Final Rejection", Application Serial No. 16/012,513, 12/11/2018, pp. 1-10	
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	Art Unit		
	Examiner Name		
	Attorney Docket Number		1348.002US6

7	U.S. PATENT AND TRADEMARK OFFICE, "Notice of Allowance", Application Serial No. 16/251,834, 04/22/2020, pp. 1-9
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9	U.S. PATENT AND TRADEMARK OFFICE, "Office Action", Application Serial No. 16/012,513, 07/31/2018, pp. 1-8
10	U.S. PATENT AND TRADEMARK OFFICE, "Office Action", Application Serial No. 16/251,834, 5/9/2019, pp. 1-10

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Examiner Signature	/MICHAEL T VU/	Date Considered	11/23/2020
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(Not for submission under 37 CFR 1.99)

Application Number		
Filing Date		2020-05-12
First Named Inventor	Peter D. Karabinis	
Art Unit		
Examiner Name		
Attorney Docket Number		1348.002US6

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That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

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See attached certification statement.

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

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Signature	/Aaron W. Pederson/	Date (YYYY-MM-DD)	2020-05-12
Name/Print	Aaron Pederson	Registration Number	58607

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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.
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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 inspections 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.



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BIB DATA SHEET

CONFIRMATION NO. 1207

SERIAL NUMBER	FILING or 371(c) DATE RULE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.		
15/929,609	05/12/2020	455	2641	1348.002US6		
APPLICANTS Telcom Ventures LLC, Miami, FL; INVENTORS Peter D. Karabinis, Cary, NC; Rajendra Singh, Indian Creek Village, FL; ** CONTINUING DATA ***** This application is a CON of 16/012,513 06/19/2018 PAT 10660015 which is a DIV of 15/800,885 11/01/2017 PAT 10219199 which is a CON of 15/251,882 08/30/2016 PAT 9832708 which is a CON of 12/264,711 11/04/2008 PAT 9462411 ** FOREIGN APPLICATIONS ***** ** IF REQUIRED, FOREIGN FILING LICENSE GRANTED ** ** SMALL ENTITY ** 05/18/2020						
Foreign Priority claimed ☐ Yes ☒ No 35 USC 119(a-d) conditions met ☐ Yes ☒ No Verified and /MICHAEL T VU/ Acknowledged Examiner's Signature		☐ Met after Allowance Initials	STATE OR COUNTRY NC	SHEETS DRAWINGS 3	TOTAL CLAIMS 25	INDEPENDENT CLAIMS 3
ADDRESS Carlson, Caspers, Vandenburg & Lindquist, P.A. 225 S. Sixth St. Ste. 4200 Minneapolis, MN 55402 UNITED STATES						
TITLE METHOD AND APPARATUS FOR SENSING PRODUCTS FOR PURCHASE						
FILING FEE RECEIVED 1035	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		



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/929,609	05/12/2020	Peter D. Karabinis	1348.002US6	1207
138517 7590 12/01/2020 Carlson, Caspers, Vandenburg & Lindquist, P.A. 225 S. Sixth St. Ste. 4200 Minneapolis, MN 55402			EXAMINER VU, MICHAEL T	
			ART UNIT	PAPER NUMBER
			2641	
			NOTIFICATION DATE	DELIVERY MODE
			12/01/2020	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):

docketing@carlsoncaspers.com
eofficeaction@appcoll.com

DETAILED ACTION

Notice of Pre-AIA or AIA Status

1. The present application is being examined under the pre-AIA first to invent provisions.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 05/12/2020 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Drawings

3. The drawings were received on 05/12/2020. These drawings are considered by examiner.

Terminal Disclaimer

4. Examiner suggests the Assignee must submit the Terminal Disclaimer accordingly, in order to process of the application promptly.

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA

1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 1, 6-8, 16, 18, 23-24 are rejected on the ground of non-statutory obviousness-type double patenting as being unpatentable over claims 1-2, 5, 9-10, 12, 16, of Patent No. **10,660,015**. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims in the instant application was filed on 05/27/2016 is non-statutory and is broader than the ones in the patent and encompasses a similar invention as recited in the patent claims, i.e., An apparatus comprising: one or more product carrying regions for carrying products for purchase; therefore, the claims are obviousness-type by the claims in U.S Patent No. **10,660,015** (See *In re Goodman*).

It is important to note that claimed features recited in claims 1-2, 5, 9-10, 12, 16, of U.S. Patent No. **10,660,015** are more specific than claimed features recited in claims 1, 6-8, 16, 18, 23-24 of the Instant Application. Hence, the scope of claims of present application is now broader than U.S. Patent No **10,660,015**.

Many decisions support the fact that a broad or generic claim is obvious from a specific claim, i.e., an obvious variation. See *In re Van Ornum and Stang*, 214 USPQ 761 (CCPA 1982); *In re Goodman* (CA FC) 29 USPQ2d 2010 (12/3/1993); *In re Vogel* and *Vogel*; 164 USPQ 619 (CCPA 1970); *In re Berg* (CA FC) 46 USPQ2d 1226

(3/30/1998); *Eli Lilly and Co. v. Barr Laboratories Inc.*, 58 USPQ2d 1865 (CA FC 2001).

It is well settled that omission of an element and its function in a combination is an obvious expedient if the remaining elements perform the same functions as before.

This notion is supported by *In re KARLSON*, 136 USPQ 184 (1963); *In re Nelson*, 95 USPQ 82 (CCPA 1952); and *In re Eliot*, 25 USPQ 111 (CCPA 1935).

Dependent claims 2-7, 9-17, and 19-25 depend either directly or indirectly upon independent claims 1-2, 5, 9-10, 12, 16, of patent applications **10,660,015** is also rejected at least for the same reasons discussed above.

Claim Rejections - 35 USC § 103

7. In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

8. The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-25 are rejected under 35 U.S.C. 103 as being unpatentable over Do et al (US 2006/0144933), hereinafter "Do", in view of Clark et al (US 7,624,923), hereinafter "Clark".

Regarding **claim 1**, Do teaches an apparatus (Figure 7 teaches an apparatus) comprising:

one or more product carrying regions for carrying products for purchase (Figure 7 teaches a shopping cart reads on for carrying products for purchase);

one or more handles for grasping by a customer to move the apparatus around a store (Figure 2A & 2B the apparatus move around for detecting the purchase products); and

Do does not explicitly teach **one or more** sensors to detect **one or more** products for purchase placed in the **one or more** product carrying regions.

Clark, in the same field of endeavor, teaches **one or more** sensors to detect **one or more** products for purchase placed in the **one or more** product carrying regions (col. 1, lines 29-57, and col. 2, lines 35-55 teach the sensor or the RFID that detect the item located in a shopping cart or shopping basket).

Therefore, it would have been obvious before the effective filing date of the claimed invention to one of ordinary skill in the art to provide the above teaching of Do to Clark, in order to provide sensing and indicating of the content to customers while they are shopping at a store such as placed in a customer's shopping cart or shopping basket based on the detected items for influencing the purchasing decisions made by the retail customers (as suggested by Clark in col. 1, lines 12-25).

Regarding **claim 2**, the combination of Do and Clark teach the apparatus of claim 1, Do further teaches comprising: a computing system communicatively coupled to the **one or more** sensors (Figure 7 teaches the shopping cart, and pars [0028-0030] teach activated by scanning an item's signal or radio tag with bar code reader/magnetic card/smartcard reader module), the computing system configured to identify **one or more** products added to the **one or more** product carrying regions based on information from the **one or more** sensors (pars [0028-0030] teach activated by scanning an item's signal or radio tag with bar code reader/magnetic card/smartcard reader module reads on sensor).

Regarding **claim 3**, the combination of Do and Clark teach the apparatus of claim 2, Do further teaches wherein the computing system is further configured to identify **one or more** products removed from the **one or more** product carrying regions based on information from the **one or more** sensors (Figure 7 teaches the shopping cart, and pars [0028-0030] teach activated by scanning an item's signal or radio tag with bar code reader/magnetic card/smartcard reader module).

Regarding **claim 4**, the combination of Do and Clark teach the apparatus of claim 2, Do further teaches wherein the computing system is further configured to obtain **at least one** of a weight, manufacturer, expiration date, nutritional value and price of a product (pars [0024-0025] and [0029-0030] teach the price of the item that is being placed in the shopping cart).

Regarding **claim 5**, the combination of Do and Clark teach the apparatus of claim 2, Do further teaches wherein the computing system is further configured to initiate a transaction to pay for products in the **one or more** product carrying regions (pars [0025-0026] teach a shopping transaction that placed the item into the shopping cart).

Regarding **claim 6**, the combination of Do and Clark teach the apparatus of claim 1, Do further teaches wherein the apparatus is a shopping cart (pars [0025-0026] teach a shopping transaction that placed the item into the shopping cart).

Regarding **claim 7**, the combination of Do and Clark teach the apparatus of claim 1, Do further teaches wherein the **one or more** sensors include **one or more** of a radio frequency (RF) tagging sensor, a bar-code sensor, and an image recognition sensor (Figure 7 teaches the shopping cart, and pars [0028-0030] teach activated by scanning an item's signal or radio tag with bar code reader/magnetic card/smartcard reader module).

Regarding **claim 8**, Do teaches an apparatus (Figure 7 teaches a shopping cart) comprising:

one or more sensors; and

data transfer electronics, communicatively coupled to a processing device and to **one or more** sensors (Figure 7, and pars [0029-0030] teach the radio tag with bar code reader/magnetic card/smartcard reader module), that cause the processing device to:
and

obtain **one or more** of a weight (Figure 4 teach the item, price and unit), manufacturer, expiration date, nutritional value **and** price of the object (pars [0029-0030] teach the providing quantitative price data).

Do does not explicitly teach identify an object in the shopping cart based on information from the **one or more** sensors;

Clark, in the same field of endeavor, teaches identify an object in the shopping cart based on information from the **one or more** sensors;

Clark, in the same field of endeavor (col. 1, lines 29-57, and col. 2, lines 35-55 teach the sensor or the RFID that detect the item located in a shopping cart or shopping basket).

Therefore, it would have been obvious before the effective filing date of the claimed invention to one of ordinary skill in the art to provide the above teaching of **Do** to Clark, in order to provide sensing and indicating of the content to customers while they are shopping at a store such as placed in a customer's shopping cart or shopping basket based on the detected items for influencing the purchasing decisions made by the retail customers (as suggested by Clark in col. 1, lines 12-25).

Regarding **claim 9**, the combination of **Do** and Clark teach the shopping cart of claim 8, **Do** further teaches wherein the data transfer electronics further cause the processing device to: establish a short-range wireless communications link with the data transfer electronics (pars [0035-0039] teach establish a **short-range wireless interface**); and receive, via the short-range wireless communications link data relating to **at least one** of a weight, manufacturer, expiration date, nutritional value and price of the object

that is being placed in the shopping cart (pars [0024-0025] and [0029-0030] teach the price of the item that is being placed in the shopping cart).

Regarding **claim 10**, the combination of Do and Clark teach the shopping cart of claim 9, Do further teaches wherein the processing device comprises a wireless communications device (pars [0035-0036] teach comprises a wireless communications device).

Regarding **claim 11**, the combination of Do and Clark teach the shopping cart of claim 10, Do further teaches wherein the data transfer electronics sends to the wireless communication device data associated with a weight (Figure 4 teaches the item, price, and unit reads on a weight), manufacturer, expiration date, nutritional value and price of the object that is being placed in the shopping cart (pars [0024-0025] and [0029-0030] teach the price of the item that is being placed in the shopping cart).

Regarding **claim 12**, the combination of Do and Clark teach the shopping cart of claim 11, Do further teaches wherein the short-range communications link that is established with the wireless communication device is responsive to an action performed by the wireless communications device (pars [0035-0039] teach establish a short-range wireless interface).

Regarding **claim 13**, the combination of Do and Clark teach the shopping cart of claim 8, Do further teaches wherein the data transfer electronics cause the processing

device to: determine that an object has been added to the shopping cart (pars [0044-0047]); and determine that an object has been removed from the shopping cart (pars [0044-0047] teach determining the item that added or removed from the shopping cart).

Regarding **claim 14**, the combination of Do and Clark teach the shopping cart of claim 13, Do further teaches wherein the processing device is enabled to perform a transaction to pay for **one or more** objects that are in the shopping cart (pars [0024-0025] and [0029-0030] teach the price of the item that is being placed in the shopping cart).

Regarding **claim 15**, the combination of Do and Clark teach the shopping cart of claim 14, Do further teaches wherein the processing device is enabled to perform the transaction to pay for the **one or more** objects that are in the shopping cart responsive to being proximate to a specific location (pars [0025-0026] teach performing the transaction).

Regarding **claim 16**, the combination of Do and Clark teach the shopping cart of claim 15, Do further teaches wherein the specific location comprises a check-out counter (pars [0036-0037] teach check-out).

Regarding **claim 17**, the combination of Do and Clark teach the shopping cart of claim 8, Do further teaches wherein the one or more sensors include **one or more** of a

radio frequency (RF) tagging sensor, a bar-code sensor, and an image recognition sensor (Figure 7 teaches the shopping cart, and pars [0028-0030] teach activated by scanning an item's signal or radio tag with bar code reader/magnetic card/smartcard reader module).

Regarding **claim 18**, Do teaches a method performed by an apparatus having **one or more** carrying regions for carrying products for purchase (Figure 7 teaches a shopping cart reads on for carrying products for purchase), the method comprising:

detecting **one or more** products for purchase in the **one or more** carrying regions (Figure 7 teaches a shopping cart reads on for carrying products for purchase);

determining, based on the detecting, that **one or more** products has been added to the **one or more** carrying regions;

determining, based on the detecting, that **one or more** products has been removed from the **one or more** carrying regions; and

initiating a transaction to pay for products in the **one or more** product carrying regions (pars [0025-0026] [0045-0047] teach purchase the transaction).

Do does not explicitly teach determining and detecting the products has been added or removed from the carrying regions based on the sensor.

Clark, in the same field of endeavor, teaches determining and detecting the products has been added or removed from the carrying regions based on the sensor (col. 1, lines 29-57, and col. 2, lines 35-55 teach the sensor or the RFID that detect the item located in a shopping cart or shopping basket).

Therefore, it would have been obvious before the effective filing date of the claimed invention to one of ordinary skill in the art to provide the above teaching of Do to Clark, in order to provide sensing and indicating of the content to customers while they are shopping at a store such as placed in a customer's shopping cart or shopping basket based on the detected items for influencing the purchasing decisions made by the retail customers (as suggested by Clark in col. 1, lines 12-25).

Regarding **claim 19**, the combination of Do and Clark teach the method of claim 18, Do further teaches comprising: obtaining **at least one** of a weight, manufacturer, expiration date, nutritional value **or** price of a product in the **one or more** carrying regions (pars [0024-0025] and [0029-0030] teach the price of the item that is being placed in the shopping cart).

Regarding **claim 20**, the combination of Do and Clark teach the method of claim 18, Do further teaches comprising: establishing a short-range communications link with a wireless communication device; and sending to the wireless communication device over the short-range communications link information for **one or more** products in the **one or more** carrying regions (Figure 7 teaches the shopping cart, and pars [0028-0030] teach activated by scanning an item's signal or radio tag with bar code reader/magnetic card/smartcard reader module).

Regarding **claim 21**, the combination of Do and Clark teach the method of claim 20, Do further teaches wherein sending information to the wireless communication

device includes sending **one or more** of a weight, manufacturer, expiration date, nutritional value **and/or** price of **one or more** products (pars [0024-0025] and [0029-0030] teach the price of the item that is being placed in the shopping cart).

Regarding **claim 22**, the combination of Do and Clark teach the method of claim 21, Do further teaches wherein sending information to the wireless communication device includes sending information identifying a product that has been added to **or** removed from the one or more carrying regions (pars [0024-0025] and [0029-0030] teach the price of the item that is being placed in the shopping cart).

Regarding **claim 23**, the combination of Do and Clark teach the method of claim 18, Do further teaches wherein detecting one or more products includes detecting based upon one or more of a radio frequency (RF) tagging technology, a bar- code technology, and an image recognition technology (Figure 7 teaches the shopping cart, and pars [0028-0030] teach activated by scanning an item's signal or radio tag with bar code reader/magnetic card/smartcard reader module).

Regarding **claim 24**, the combination of Do and Clark teach the method of claim 18, Do further teaches wherein the apparatus is a shopping cart (Figure 7 teach the shopping cart).

Regarding **claim 25**, the combination of Do and Clark teach the method of claim 18, Do further teaches wherein said initiating a transaction occurs responsive to a

proximity with a specific location (pars [0020-0021] teach the transaction base on the short range communication reads on a proximity).

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL T VU whose telephone number is (571)272-8131. The examiner can normally be reached on 8:00AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on 571-272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MICHAEL T VU/
Primary Examiner, Art Unit 2641

<i>Index of Claims</i> 	Application/Control No. 15/929,609	Applicant(s)/Patent Under Reexamination Karabinis et al.
	Examiner MICHAEL T VU	Art Unit 2641

✓	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	11/20/2020								
	1	✓								
	2	✓								
	3	✓								
	4	✓								
	5	✓								
	6	✓								
	7	✓								
	8	✓								
	9	✓								
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	19	✓								
	20	✓								
	21	✓								
	22	✓								
	23	✓								
	24	✓								
	25	✓								

Search Notes 	Application/Control No. 15/929,609	Applicant(s)/Patent Under Reexamination Karabinis et al.
	Examiner MICHAEL T VU	Art Unit 2641

CPC - Searched*		
Symbol	Date	Examiner
H04W 48/04	11/20/2020	MTV

CPC Combination Sets - Searched*		
Symbol	Date	Examiner

US Classification - Searched*			
Class	Subclass	Date	Examiner

* 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
Inventor: Peter Karabinis	11/20/2020	MTV
Assignee: Telcom Ventures LLC	11/20/2020	MTV
Double Patent Rejected	11/20/2020	MTV
EAST Searched System	11/20/2020	MTV
Telework Covid-19	11/20/2020	MTV

Interference Search			
US Class/CPC Symbol	US Subclass/CPC Group	Date	Examiner

/MICHAEL T VU/ Primary Examiner, Art Unit 2641	
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EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	0	16/012513	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/07/26 18:14
S2	55	sens\$3 near9 (detect\$3 determin\$4) near9 displac\$3 same store	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/07/26 18:16
S3	0	sens\$3 near9 (detect\$3 determin\$4) near9 displac\$3 same store and (RFID tagg\$3 barcode bar-code)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/07/26 18:17
S4	1,033	(detect\$3 determin\$4) near9 (miss\$3 displac\$3) near9 item	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/07/26 18:19
S5	8	(detect\$3 determin\$4) near9 (miss\$3 displac\$3) near9 item same shopping near5 cart	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/07/26 18:22
S6	10	(detect\$3 determin\$4) same (RFID tagg\$3) same (miss\$3 displac\$3) same (shopping adj3 cart)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/07/26 18:27

S7	97	(detect\$3 determin\$4) near9 (miss\$3 displac\$3) near9 item same (warehouse store building)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/07/30 12:40
S8	5	S7 AND ((H04W4/021 OR H04W4/043).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/07/30 12:45
S9	50	S7 AND ((G06F12/1027 OR G06F12/1054 OR G06F17/30132 OR G06F2212/682 OR G06F17/30174 OR G06F17/30575 OR G06F17/30017 OR G06F17/30067 OR G06F17/30215 OR G06F21/50 OR G06F21/88 OR G06F2221/2101 OR G06F2221/2111 OR G06F19/00 OR G06F12/0842 OR G06F12/0864 OR G06F12/121 OR G06F9/30043 OR G06F9/3824 OR G06F12/0804 OR G06F12/082 OR G06F12/0831 OR G06F17/30011 OR G06F17/30023 OR G06F17/30115 OR G06F17/30165 OR G06F17/30233 OR G06F17/30345 OR G06F17/30625 OR G06F17/30631 OR G06F2212/1016 OR G06F2212/604 OR G06F3/14 OR G06F12/0848 OR G06F12/0862 OR G06F12/0866 OR G06F12/0875 OR G06F12/0895 OR G06F12/10 OR G06F12/1018 OR G06F12/12 OR G06F12/1408 OR G06F17/3002 OR G06F17/30035 OR G06F17/30389 OR G06F17/30424 OR G06F17/30442 OR G06F17/30451 OR G06F17/30457 OR G06F17/30477 OR G06F17/30483 OR G06F17/30498 OR G06F17/30516 OR G06F17/30548 OR G06F17/30551 OR G06F17/30554 OR G06F17/30557 OR G06F17/30578 OR G06F17/30616 OR G06F17/30864 OR G06F17/30958 OR G06F19/3418 OR G06F19/3456 OR G06F2212/1021 OR G06F2212/1024	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/07/30 12:45

		OR G06F2212/1052 OR G06F2212/6026 OR G06F2212/608 OR G06F3/0482 OR G06F3/04842 OR G06F3/0619 OR G06F3/0644 OR G06F3/0652 OR G06F3/0665 OR G06F3/0689 OR H04W4/021 OR H04W4/043).CPC.)				
S10	9	S7 AND ((H04W4/021 OR H04W4/043 OR H04B1/713).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/07/30 12:46
S11	50	S7 AND ((G06Q10/087 OR G06Q30/06 OR G06Q10/08 OR G06Q40/02 OR G06Q20/202 OR G06Q20/208 OR G06Q30/0601 OR G06Q20/042 OR G06Q50/22 OR G06Q50/24 OR G06Q30/0611 OR G06Q10/10 OR G06Q30/0207 OR G06Q30/0621 OR G06Q30/0641 OR G06Q40/12 OR G06Q10/083 OR G06Q20/10 OR G06Q30/01 OR G06Q30/0203 OR G06Q30/0223 OR G06Q30/0239 OR G06Q30/0251 OR G06Q30/0255 OR G06Q30/0268 OR G06Q30/0276 OR G06Q30/0623 OR G06Q50/01).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/07/30 12:46
S12	14	S7 AND ((H04L67/1095 OR H04L47/196 OR H04L61/1582 OR H04L67/06 OR H04L67/10 OR H04L67/1023 OR H04L67/104 OR H04L67/108 OR H04L67/1097 OR H04L67/2842 OR H04L25/0226 OR H04L67/02 OR H04L67/2852).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/07/30 12:46
S13	2	(sens\$3 RFID tagg\$3) near8 (item merchandise) near8 (displac\$3 miss\$3) near9 store	USPAT	OR	OFF	2018/07/30 14:08
S14	5	(sens\$3 RFID tagg\$3) near8 (item merchandise) near8 (displac\$3 miss\$3) near9 store	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/07/30 14:09
S15	130	(sens\$3 RFID tagg\$3) same ((charg\$3 pric\$3) near6 (item merchandise)) near8 (cart person people buyer)	US-PGPUB; USPAT; USOCR; FPRS; EPO;	OR	OFF	2018/12/07 16:08

			JPO; DERWENT; IBM_TDB			
S16	29	(sens\$3 RFID tagg\$3) same (phone cellular cell mobile pda iphone ipad) same ((charg\$3 pric\$3) near6 (item merchandise)) near8 (cart person people buyer)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/07 16:11
S17	596	(sens\$3 RFID tagg\$3 link\$3 interfac\$3) same (phone cellular cell mobile pda iphone ipad) near9 (shopping adj2 cart)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/07 16:19
S18	26	(phone cellular cell mobile pda iphone ipad) near9 (shopping adj2 cart) same (check\$3 track\$3) near6 (pric\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/07 16:21
S19	27	(phone cellular cell mobile pda iphone ipad smartphone smart-phone smart-mobile smartmobile) near9 (shopping adj2 cart) same (check\$3 track\$3) near6 (pric\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/07 16:36
S20	2,061	(phone cellular cell mobile pda iphone ipad smartphone smart-phone smart-mobile smartmobile) near9 (shopping adj2 cart)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/07 16:37
S21	511	(phone cellular cell mobile pda iphone ipad smartphone smart-phone smart-mobile smartmobile) near9 (shopping adj2 cart) same (price item)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/07 16:38
S22	249	(phone cellular cell mobile pda iphone ipad smartphone smart-phone smart-mobile smartmobile) near9 (shopping adj2 cart) near9 (price item)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	OFF	2018/12/07 16:38

			DERWENT; IBM_TDB			
S23	33	(phone cellular cell mobile pda iphone ipad smartphone smart- phone smart-mobile smartmobile) near9 (shopping adj2 cart) near9 (detect\$3 track\$3 check\$3) near6 (price item)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/07 16:39
S24	4	"20070129077"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/07 16:44
S25	3	"20070260710"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/07 16:45
S26	403	(phone cellular cell mobile pda iphone ipad smartphone smart- phone smart-mobile smartmobile) same (link\$4 interfac\$3) near9 (shopping adj2 cart)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/07 16:46
S27	115	(phone cellular cell mobile pda iphone ipad smartphone smart- phone smart-mobile smartmobile) near10 (link\$4 interfac\$3) near9 (shopping adj2 cart)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/07 16:49
S28	277	(phone cellular cell mobile pda iphone ipad smartphone smart- phone smart-mobile smartmobile) near10 (link\$4 interfac\$3 (short adj range) RFID) with (shopping adj2 cart)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/08 15:53
S29	433	pay near5 function near8 (mobile pda cell cellular phone iphone ipad)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	OFF	2018/12/10 13:16

			DERWENT; IBM_TDB			
S31	6	"20060085297"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/10 14:54
S32	22,452	(mobile phone cellular iphone) near4 pay\$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/10 14:56
S33	1,065	(mobile phone cellular iphone) near4 pay\$3 same shop\$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/10 14:56
S34	422	(mobile phone cellular iphone) near4 pay\$3 near9 shop\$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/10 14:56
S35	10	(detect\$3 sens\$3) near10 (mobile phone cellular iphone) near4 pay\$3 near9 shop\$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/10 14:57
S36	35	(mobile phone cellular iphone) near4 pay\$3 near9 shop\$4 near2 cart	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/10 14:58
S37	5,080	(mobile phone cellular iphone pda) near9 (pay\$3 purchas\$3) same shopping	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	OFF	2018/12/10 15:00

			DERWENT; IBM_TDB			
S38	2,484	(mobile phone cellular iphone pda) near9 (pay\$3 purchas\$3) near9 shopping	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/10 15:00
S39	3,575	(mobile phone cellular iphone pda) near9 (pay\$3 paid purchas\$3) near9 item	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/10 15:01
S40	220	(mobile phone cellular iphone pda) near9 (pay\$3 paid purchas\$3) near9 item same (shop\$4 adj cart)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/10 15:02
S41	20	((shopping adj cart) near8 (identity number) near6 assign\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/04/05 14:56
S42	5	((shopping adj cart) near8 (identity number) near6 assign\$3) same (phone smart mobile pda cellular)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/04/05 14:56
S43	20	((shopping adj cart) near8 (identity number) near6 assign\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/04/05 14:59
S44	5	"9474012"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	OFF	2019/04/08 13:24

			DERWENT; IBM_TDB			
S45	12,155	(delet\$3 modif\$3 withdraw\$3 deduct\$3 chang\$3) same (item product) same (mobile phone portable pda iphone smartphone smart-phone)	USPAT	OR	OFF	2019/04/09 11:15
S46	1,885	(delet\$3 modif\$3 withdraw\$3 deduct\$3 chang\$3) with (item product) near10 (mobile phone portable pda iphone smartphone smart-phone)	USPAT	OR	OFF	2019/04/09 11:18
S47	7	(delet\$3 modif\$3 withdraw\$3 deduct\$3 chang\$3) with (item product) near10 (mobile phone portable pda iphone smartphone smart-phone) same (shopp\$3 adj2 cart)	USPAT	OR	OFF	2019/04/09 11:18
S48	7	(delet\$3 modif\$3 withdraw\$3 deduct\$3 chang\$3) with (item product) near10 (mobile phone portable pda iphone smartphone smart-phone) same (shopp\$3 adj2 cart)	USPAT	OR	OFF	2019/04/09 11:20
S49	7	S48 AND ((G06Q30/06 OR G06Q30/0633 OR G06Q30/0641 OR G06Q10/083 OR G06Q30/0635 OR G06Q10/0836 OR G06Q10/087 OR G06Q20/20 OR G06Q20/343 OR G06Q20/36 OR G06Q30/02 OR G06Q30/0211 OR G06Q30/0214 OR G06Q30/0222 OR G06Q30/0224 OR G06Q30/0242 OR G06Q30/0261 OR G06Q30/0267 OR G06Q30/0601 OR G06Q30/0623 OR G06Q30/0625).CPC.)	USPAT	OR	OFF	2019/04/09 11:21
S50	88	(delet\$3 modif\$3 withdraw\$3 deduct\$3 chang\$3) same (item product) same (mobile phone portable pda iphone smartphone smart-phone) same (shopp\$3 adj2 cart)	USPAT	OR	OFF	2019/04/09 11:22
S51	1	16/012513	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/10/18 12:09

S52	13	customer same (short adj range) same (check\$4 adj out)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/10/18 12:12
S53	5	customer same (short adj range) same (check\$4 adj out) same (counter purchas\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/10/18 12:13
S54	13	shopp\$3 same (short adj range) same (check\$4 adj out) same (counter purchas\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/10/18 12:14
S55	43	("20040030601" "20040170430" "20060009234" "20060133633" "20060145893" "20060159260" "20060172700" "20070167147" "20070178935" "20070184837" "20070197261" "20070250393" "20070265984" "20070285280" "20080040274" "20080140868" "20080146148" "20080167966" "20080200166" "20080227471" "20080306868" "20090023474" "20090113543" "20090153367" "20090169070" "20090213947" "20100067591" "20100265845" "20110314539" "20120214443" "20130156218" "6595929" "6769607" "6957107" "7028897" "7133659" "7155199" "7539241" "7822644" "7912629" "8532069" "8646060" "RE39736").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2019/10/18 12:15
S56	280	shopp\$3 same (short adj range) same ((check\$4 adj out) counter purchas\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/10/18 12:19

S57	52	shopp\$3 same (short adj range) same ((check\$4 adj out) counter purchas\$3) near8 store	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/10/18 12:19
S58	111	(phone iphone mobile PDA cellular) same shopp\$3 same (short adj range) same ((check\$4 adj out) counter purchas\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/10/18 12:21
S59	0	(phone iphone mobile PDA cellular) same (shopp\$3 adj card) same (short adj range) same ((check\$4 adj out) counter purchas\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/10/18 13:04
S60	1	(phone iphone mobile PDA cellular) same (shopp\$3 adj card) same (short adj range)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/10/18 13:04
S61	670	(phone iphone mobile PDA cellular) same (wallet basket cart) same (short adj range)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/10/18 13:07
S62	21	(phone iphone mobile PDA cellular) same (wallet basket cart) same (short adj range) same (purchas\$3 near8 store)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/10/18 13:08
S63	6	(phone iphone mobile PDA cellular) same (short adj range) same (wallet basket cart) same (check\$3 adj2 out)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/10/18 13:10

S64	6	(phone iphone mobile PDA cellular) same (short adj range) same (wallet basket cart (carry\$3 near2 structure)) same (check\$3 adj2 out)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/10/18 13:12
S65	3,456	(wallet basket cart (carry\$3 near2 structure)) near9 (check\$3 adj2 out)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/10/18 13:14
S66	1,760	(wallet basket cart (carry\$3 near2 structure)) near9 (check\$3 adj2 out) same purchas\$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/10/18 13:14
S67	254	(wallet basket cart (carry\$3 near2 structure)) near9 (check\$3 adj2 out) same purchas\$3 same pric\$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/10/18 13:15
S68	762	sens\$3 same carry\$3 same (short-range (short adj range))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/12/12 15:06
S69	4	sens\$3 same carry\$3 same (short-range (short adj range)) same (purchas\$3 buy\$3 pay\$3) near6 (product merchant merchandise item)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2019/12/12 15:08
S70	21	sensor same (carry\$3 basket) same (short-range (short adj range)) same (purchas\$3 buy\$3 pay\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2019/12/12 15:10

S71	184	sens\$3 near9 carry\$3 same (short-range (short adj range))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/12/12 15:16
S72	192	sens\$3 near9 (basket carry\$3) same (short-range (short adj range))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/12/12 15:17
S73	59	2004/0143550	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/12/12 15:18
S74	1	10/324537	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/12/12 15:18
S75	2	sens\$3 near9 (basket carry\$3) same (short-range (short adj range)) same (shopp\$3 buy\$3 purchas\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/12/12 15:21
S76	310	sens\$3 same (short-range (short adj range)) same (shopp\$3 buy\$3 purchas\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/12/12 15:25
S77	4	sens\$3 same (short-range (short adj range)) same (shopp\$3 buy\$3 purchas\$3) near9 ((check\$ adj out) checkout)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/12/12 15:27

S78	71	sens\$3 near15 (short-range (short adj range)) same (shopp\$3 buy\$3 purchas\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/12/12 15:27
S81	117	(sensor sens\$3) near15 (shopp\$3 buy\$3 purchas\$3) near8 (store) near9 (mobile cellular portable pda iphone ipad)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2019/12/12 15:32
S82	2	11/040847	USPAT	OR	OFF	2019/12/12 16:56
S83	18	11/040847	US-PGPUB; USPAT	OR	OFF	2019/12/12 16:56
S85	7,393	H04W48/04.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2019/12/13 16:42
S86	117	(sensor sens\$3) near15 (shopp\$3 buy\$3 purchas\$3) near8 (store) near9 (mobile cellular portable pda iphone ipad)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2019/12/13 16:42
S87	0	S85 and S86	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2019/12/13 16:42
S88	86	S86 AND ((G06Q30/02 OR G06Q30/0201 OR G06Q10/10 OR G06Q20/1235 OR G06Q30/06 OR G06Q30/0269 OR G06Q10/087 OR G06Q50/01 OR G06Q30/0261 OR G06Q30/0265 OR G06Q30/0631 OR G06Q30/0267 OR G06Q30/0241 OR G06Q30/0255 OR G06Q20/208 OR G06Q30/0202 OR G06Q30/0601 OR G06Q30/0633 OR G06Q30/0635 OR G06Q10/08 OR G06Q10/0838 OR	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2019/12/13 16:43

		G06Q20/12 OR G06Q30/0203 OR G06Q30/0204 OR G06Q30/0207 OR G06Q30/0251 OR G06Q30/0281 OR G06Q10/06 OR G06Q10/06393 OR G06Q10/101 OR G06Q20/123 OR G06Q20/18 OR G06Q20/202 OR G06Q20/322 OR G06Q20/3223 OR G06Q20/327 OR G06Q20/38 OR G06Q20/3829 OR G06Q20/42 OR G06Q2220/00 OR G06Q30/016 OR G06Q30/0211 OR G06Q30/0226 OR G06Q30/0239 OR G06Q30/0259 OR G06Q30/0621 OR G06Q30/0625 OR G06Q30/0639 OR G06Q30/0641 OR G06Q30/0643).CPC.)				
S89	39	S86 AND ((G06F16/9535 OR G06F16/273 OR G06F16/3344 OR G06F16/4387 OR G06F16/4393 OR G06F16/637 OR G06F16/639 OR G06F21/10 OR G06F21/6236 OR G06F2213/0038 OR G06F2216/01 OR G06F2221/2113 OR G06F2221/2137 OR G06F3/14 OR G06F16/24 OR G06F16/24575 OR G06F16/90328 OR G06F17/27 OR G06F3/011 OR G06F3/013 OR G06F8/00 OR G06F16/9537 OR G06F17/5054 OR G06F1/3234 OR G06F21/57 OR G06F21/602 OR G06F21/74 OR G06F21/85 OR G06F2217/78 OR G06F3/0482 OR G06F3/0484 OR G06F3/0485).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2019/12/13 16:43
S90	9	S86 AND ((H04M2203/2044 OR H04M2203/554 OR H04M2203/655 OR H04M2207/18 OR H04M3/42374 OR H04M1/0264).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2019/12/13 16:43
S91	25	S86 AND ((H04W4/16 OR H04W4/029 OR H04W4/80 OR H04W4/21 OR H04W4/50 OR H04W4/70 OR H04W4/12 OR H04W4/02 OR H04W4/023 OR H04W4/60 OR H04W64/00 OR H04W48/16 OR H04W4/021 OR H04W4/06 OR H04W4/18 OR H04W64/006 OR H04W8/22).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2019/12/13 16:43
S92	109	(phone cellular cell mobile pda iphone ipad smartphone smart- phone smart-mobile smartmobile)	US-PGPUB; USPAT; USOCR;	OR	ON	2019/12/13 16:44

		near9 (shopping adj2 cart) near9 (detect\$3 track\$3 check\$3) near6 (price item)	FPRS; EPO; JPO; DERWENT; IBM_TDB			
S93	13	S92 AND ((H04W4/029 OR H04W12/06 OR H04W4/023 OR H04W12/00508 OR H04W4/02 OR H04W4/024 OR H04W4/24 OR H04W4/33).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2019/12/13 16:44
S94	34	("20030055707" "20050256786" "20060200378" "20080306756" "20090012704" "20110029997" "20120095805" "20120123674" "20130103539" "20130282533" "20140359510" "20150100383" "20150269549" "20160041000" "6018397" "6601759" "6606411" "6745186" "6810149" "6886101" "6937989" "7006982" "7177820" "7222363" "7431208" "7587756" "7716064" "8069092" "8207851" "8572712" "8814039" "8820633" "8851369" "8930134").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2019/12/13 16:45
S95	4	("20040193413" "20140033134" "20140337930" "20150085111").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2019/12/13 16:45
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S104	45	(phone cellular cell mobile pda iphone ipad smartphone smart- phone smart-mobile smartmobile) near9 (shopping adj2 cart) same sens\$3 same (RFID (short adj range))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/03/17 13:36
S105	6	S104 AND ((H04W4/029 OR H04W4/02 OR H04W4/024 OR H04W4/026 OR H04W4/18 OR H04W4/021 OR H04W4/33 OR H04W4/80).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/03/17 13:36
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S108	3	sens\$3 near9 (detect\$3 determin\$4) same (bought buy purchas\$3 plac\$3) same (shopping adj card)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/03/19 17:10
S109	1	sens\$3 near9 (detect\$3 determin\$4) same (bought buy purchas\$3 plac\$3) same (shopping adj card) same store	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/03/19 17:11

S110	3	("20030158796" "20040262386" "20050071234").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2020/03/19 17:11
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S112	2	S108 AND ((G07F9/026).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/03/19 17:11
S113	252	(sensor sens\$3) near15 (shopp\$3 buy\$3 purchas\$3) near8 (store) same (mobile cellular portable pda iphone ipad)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/03/19 17:12
S114	36	S113 AND ((H04W4/029 OR H04W4/80 OR H04W4/02 OR H04W4/70 OR H04W4/12 OR H04W4/18 OR H04W4/21 OR H04W4/50 OR H04W12/06 OR H04W4/023 OR H04W4/16 OR H04W64/00 OR H04W12/001 OR H04W48/16 OR H04W4/021 OR H04W4/024 OR H04W4/026 OR H04W4/06 OR H04W4/60 OR H04W8/22).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/03/19 17:13
S115	0	(sens\$3 RFID tagg\$3 (short adj range)) and (phone cellular cell mobile pda iphone ipad) and (identity near6 (shopping adj card)) and ((charg\$3 pric\$3 paid pay bought checkout check-out) and (plac\$3 put) near9 (shopping adj card)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/03/19 17:17
S116	1	(phone cellular cell mobile pda iphone ipad smartphone smart- phone smart-mobile smartmobile) near9 (shopping adj2 cart) same sens\$3 same (short adj range)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/03/19 17:17

S117	1,365,474	(455/\$.ccls. 370/\$.ccls. 379/\$.ccls. 705/\$.ccls. 709/\$.ccls.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/03/19 17:30
S118	49	(phone cellular cell mobile pda iphone ipad smartphone smart- phone smart-mobile smartmobile) near9 (shopping adj2 cart) same sens\$3 same (RFID Wifi Wi-fi (short adj range))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/03/19 17:31
S119	8	S117 and S118	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/03/19 17:32
S120	1	S119 AND ((H04W4/02 OR H04W4/024 OR H04W4/026 OR H04W4/029 OR H04W4/18).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/03/19 17:32
S121	8	S119 AND ((G06Q30/02 OR G06Q20/202 OR G06Q30/0207 OR G06Q30/0214 OR G06Q30/0223 OR G06Q30/0226 OR G06Q30/0234 OR G06Q30/0238 OR G06Q30/0239 OR G06Q30/0251 OR G06Q30/0253 OR G06Q30/0267 OR G06Q30/0268 OR G06Q30/0276 OR G06Q30/0277 OR G06Q30/0601 OR G06Q30/0633 OR G06Q30/0639 OR G06Q90/20).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/03/19 17:32
S122	3	("7830259" "7937723" "8172096").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2020/03/19 17:32
S123	6,132	((radio adj frequenc\$3) RF tag tagging bar-code (bar adj code) (image adj recognition) sens\$3 sensor) same ((shopping adj basket) (shopping adj cart))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/11/19 15:47

S124	19	((radio adj frequenc\$3) RF tag tagging bar-code (bar adj code) (image adj recognition)) same ((sens\$3 sensor) near6 purchas\$3) same ((shopping adj basket) (shopping adj cart))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/11/19 15:49
S125	61	("20030220105" "20040030601" "20040143505" "20040143550" "20040170430" "20060009234" "20060085297" "20060133633" "20060145893" "20060159260" "20060165060" "20060172700" "20060194538" "20070129077" "20070167147" "20070178935" "20070184837" "20070197261" "20070243872" "20070250393" "20070260710" "20070265984" "20070285280" "20080040274" "20080140667" "20080140868" "20080146148" "20080167966" "20080200166" "20080227471" "20080306868" "20090023474" "20090113543" "20090153367" "20090169070" "20090213947" "20100067591" "20100265845" "20110314539" "20120214443" "20130156218" "6595929" "6769607" "6944981" "6957107" "7028897" "7133659" "7155199" "7503504" "7539241" "7780081" "7822644" "7912629" "8023580" "8091780" "8249935" "8463238" "8532069" "8646060" "8965281" "RE39736").PN.	US-PGPUB; USPAT	OR	OFF	2020/11/23 10:03
S126	4	16/012513	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/11/23 14:04

11/23/2020 3:09:53 PM

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 15/929,609
Applicant : Telcom Ventures LLC
Filed : May 12, 2020
Art Unit : 2641
Examiner : Michael T VU
Confirmation No.: 1207
Docket No. : 1348.002US6
Customer No. : 138517
Title : METHOD AND APPARATUS FOR SENSING PRODUCTS FOR
PURCHASE

RESPONSE TO NON-FINAL OFFICE ACTION

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In response to the Non-Final Office Action mailed December 1, 2020, please consider the following:

Amendments to the Claims, beginning at page 2 of this paper;

Remarks, beginning on page 6 of this paper.

Should any fee be deemed to be due for this filing or any other fees required for the subject application, please charge the appropriate amount to Deposit Account No. 502880.

AMENDMENTS TO THE CLAIMS

Listing of Claims:

1. (Currently Amended) An apparatus comprising:
one or more product carrying regions for carrying products for purchase;
one or more handles for grasping by a customer to move the apparatus around a store;
and
one or more sensors to detect one or more products for purchase placed in the one or more product carrying regions; and
a computing system communicatively coupled to the one or more sensors, the computing system configured to identify one or more products added to the one or more product carrying regions based on information from the one or more sensors, wherein the computing system is further configured to identify one or more products removed from the one or more product carrying regions based on information from the one or more sensors.
2. (Cancelled)
3. (Cancelled)
4. (Currently Amended) The apparatus of claim 1, ~~2~~, wherein the computing system is further configured to obtain at least one of a weight, manufacturer, expiration date, nutritional value and price of a product.
5. (Currently Amended) The apparatus of claim 1, ~~2~~, wherein the computing system is further configured to initiate a transaction to pay for products in the one or more product carrying regions.
6. (Original) The apparatus of claim 1, wherein the apparatus is a shopping cart.
7. (Original) The apparatus of claim 1, wherein the one or more sensors include one or more of a radio frequency (RF) tagging sensor, a bar-code sensor, and an image recognition sensor.
8. (Currently Amended) A shopping cart comprising:
one or more sensors; and

data transfer electronics, communicatively coupled to a processing device and to one or more sensors, that cause the processing device to:

identify an object in the shopping cart based on information from the one or more sensors; and

obtain one or more of a weight, manufacturer, expiration date, nutritional value and price of the object;

wherein the data transfer electronics cause the processing device to:

determine that an object has been added to the shopping cart; and

determine that an object has been removed from the shopping cart.

9. (Original) The shopping cart of claim 8, wherein the data transfer electronics further cause the processing device to:

establish a short-range wireless communications link with the data transfer electronics; and

receive, via the short-range wireless communications link data relating to at least one of a weight, manufacturer, expiration date, nutritional value and price of the object that is being placed in the shopping cart.

10. (Original) The shopping cart of claim 9, wherein the processing device comprises a wireless communications device.

11. (Original) The shopping cart of claim 10, wherein the data transfer electronics sends to the wireless communication device data associated with a weight, manufacturer, expiration date, nutritional value and price of the object that is being placed in the shopping cart.

12. (Original) The shopping cart of claim 11, wherein the short-range communications link that is established with the wireless communication device is responsive to an action performed by the wireless communications device.

13. (Cancelled)

14. (Currently Amended) The shopping cart of claim ~~8, 13~~, wherein the processing device is enabled to perform a transaction to pay for one or more objects that are in the shopping cart.

15. (Original) The shopping cart of claim 14, wherein the processing device is enabled to perform the transaction to pay for the one or more objects that are in the shopping cart responsive to being proximate to a specific location.

16. (Original) The shopping cart of claim 15, wherein the specific location comprises a check-out counter.

17. (Original) The shopping cart of claim 8, wherein the one or more sensors include one or more of a radio frequency (RF) tagging sensor, a bar-code sensor, and an image recognition sensor.

18. (Original) A method performed by an apparatus having one or more carrying regions for carrying products for purchase, the method comprising:

detecting one or more products for purchase in the one or more carrying regions;

determining, based on the detecting, that one or more products has been added to the one or more carrying regions;

determining, based on the detecting, that one or more products has been removed from the one or more carrying regions; and

initiating a transaction to pay for products in the one or more product carrying regions.

19. (Original) The method of claim 18, further comprising:

obtaining at least one of a weight, manufacturer, expiration date, nutritional value or price of a product in the one or more carrying regions.

20. (Original) The method of claim 18, further comprising:

establishing a short-range communications link with a wireless communication device;

and

sending to the wireless communication device over the short-range communications link information for one or more products in the one or more carrying regions.

21. (Original) The method of claim 20, wherein sending information to the wireless communication device includes sending one or more of a weight, manufacturer, expiration date, nutritional value and/or price of one or more products.

22. (Original) The method of claim 21, wherein sending information to the wireless communication device includes sending information identifying a product that has been added to or removed from the one or more carrying regions.
23. (Original) The method of claim 18, wherein detecting one or more products includes detecting based upon one or more of a radio frequency (RF) tagging technology, a bar-code technology, and an image recognition technology.
24. (Original) The method of claim 18, wherein the apparatus is a shopping cart.
25. (Original) The method of claim 18, wherein said initiating a transaction occurs responsive to a proximity with a specific location.

Electronic Acknowledgement Receipt	
EFS ID:	42629428
Application Number:	15929609
International Application Number:	
Confirmation Number:	1207
Title of Invention:	METHOD AND APPARATUS FOR SENSING PRODUCTS FOR PURCHASE
First Named Inventor/Applicant Name:	Peter D. Karabinis
Customer Number:	138517
Filer:	Aaron Wesley Pederson/Sage Kruse
Filer Authorized By:	Aaron Wesley Pederson
Attorney Docket Number:	1348.002US6
Receipt Date:	04-MAY-2021
Filing Date:	12-MAY-2020
Time Stamp:	11:42:41
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	DA
Payment was successfully received in RAM	\$ 740
RAM confirmation Number	E202154B43041556
Deposit Account	502880
Authorized User	Sage Kruse
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows: 37 CFR 1.16 (National application filing, search, and examination fees) 37 CFR 1.17 (Patent application and reexamination processing fees)	

37 CFR 1.19 (Document supply fees)					
37 CFR 1.20 (Post Issuance fees)					
37 CFR 1.21 (Miscellaneous fees and charges)					
File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		ResponsetoNFOA1348002US6.pdf	82320	yes	7
			cedf7a7948ed549c84a691898113fd2b089b35e0		
	Multipart Description/PDF files in .zip description				
	Document Description		Start	End	
	Amendment/Req. Reconsideration-After Non-Final Reject		1	1	
	Claims		2	5	
	Applicant Arguments/Remarks Made in an Amendment		6	7	
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	30960	no	2
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Warnings:					
Information:					
Total Files Size (in bytes):			113280		

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.

New Applications Under 35 U.S.C. 111

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.

National Stage of an International Application under 35 U.S.C. 371

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.

New International Application Filed with the USPTO as a Receiving Office

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.

REMARKS

This paper is responsive to the Non-Final Office Action dated December 1, 2020 wherein claims 1-25 were pending and rejected. With this paper, claims 1, 4, 5, 8, and 14 are amended, claims 2, 3, and 13 are cancelled. Upon entry, claims 1, 4-12, and 14-25 will be pending in this application. Reconsideration and further prosecution of the present application is respectfully requested.

Double Patenting

Claims 1, 6-8, 16, 18, 23-24 were rejected on the ground of nonstatutory double patenting as being unpatentable over claims 1-2, 5, 9-10, 12, and 16 of U.S. Patent No. 10,660,015. Applicant respectfully requests that the double patent rejection be held in abeyance until final resolution on the claims is reached.

Rejections Under 35 U.S.C. § 103

Claims 1-25 were rejected under 35 USC § 103 as being unpatentable over Do et al (US 2006/0144933) in view of Clark et al. (US 7,624,923). Applicant respectfully traverses these rejections.

Amended claim 1 recites in pertinent part:

wherein the computing system is further configured to identify one or more products removed from the one or more product carrying regions based on information from the one or more sensors.

The combination of Do and Clark does not teach or suggest this language. Do relates to a method for protecting against theft by identifying whether an item was placed into a shopping cart without being properly scanned by a personal shopping device. Do discusses various techniques for identifying when an item has been placed into a cart without being properly scanned and added to the purchase list. Clark discusses a method of identifying a product that has been placed in a cart in order to target advertisements of future products to a customer.

Neither Do nor Clark provide any reason to identify items being removed from a cart. Since Clark is concerned only with identifying products a consumer shows interest in, there is no apparent reason Clark would want to identify items being removed after they have already been identified as being inserted into the cart. Similarly, Do is only concerned with identifying items

Application No. 15/929,609

Response to Non-Final Office Action mailed December 1, 2020

that have been added to a cart without being properly scanned. Do provides no reason to think that identifying products that are removed from a cart is helpful for this process.

Claims 8 and 18 include similar limitations to claim 1.

For these reasons, Applicant respectfully asserts that the combination of Do and Clark does not teach or suggest each and every limitation of independent claims 1, 8, and 18.

Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejection of claims 1, 8, and 18 under 35 USC § 103 with respect to Do and Clark.

Claims 4-7, 9-12, 14-17, and 19-25 variously depend from or contain similar language to claims 1, 8, and 18. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejection of these claims for the reasons provided above with respect to claims 1, 8, and 18.

SUMMARY

For the reasons set out above, Applicant respectfully submits that the application is in condition for allowance. Favorable reconsideration and allowance of the application are, therefore, respectfully requested.

If the Examiner believes that anything further is necessary to place the application in better condition for allowance, the Examiner is asked to contact Applicant's undersigned representative at the telephone number below.

Customer No. 138517

Respectfully submitted,

Date: May 4, 2021

/Aaron W. Pederson/

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Electronic Patent Application Fee Transmittal				
Application Number:		15929609		
Filing Date:		12-May-2020		
Title of Invention:		METHOD AND APPARATUS FOR SENSING PRODUCTS FOR PURCHASE		
First Named Inventor/Applicant Name:		Peter D. Karabinis		
Filer:		Aaron Wesley Pederson/Sage Kruse		
Attorney Docket Number:		1348.002US6		
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:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Extension - 3 months with \$0 paid	2253	1	740	740
Miscellaneous:				
Total in USD (\$)				740

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875				Application or Docket Number 15/929,609		Filing Date 05/12/2020		☐ To be Mailed			
ENTITY: ☐ LARGE ☒ SMALL ☐ MICRO											
APPLICATION AS FILED - PART I											
		(Column 1)		(Column 2)							
FOR		NUMBER FILED		NUMBER EXTRA		RATE (\$)		FEE (\$)			
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))		N/A		N/A		N/A					
☐ SEARCH FEE (37 CFR 1.16(k), (l), or (m))		N/A		N/A		N/A					
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))		N/A		N/A		N/A					
TOTAL CLAIMS (37 CFR 1.16(i))		minus 20 = *				x \$50 =					
INDEPENDENT CLAIMS (37 CFR 1.16(h))		minus 3 = *				x \$230 =					
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))		If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).									
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))											
* If the difference in column 1 is less than zero, enter "0" in column 2.						TOTAL					
APPLICATION AS AMENDED - PART II											
		(Column 1)		(Column 2)		(Column 3)					
AMENDMENT	05/04/2021	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR		PRESENT EXTRA		RATE (\$)		ADDITIONAL FEE (\$)	
	Total (37 CFR 1.16(i))	* 22	Minus	** 25	= 0			x \$50 =		0	
	Independent (37 CFR 1.16(h))	* 3	Minus	*** 3	= 0			x \$240 =		0	
	☐ Application Size Fee (37 CFR 1.16(s))										
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))										
								TOTAL ADD'L FEE		0	
AMENDMENT		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR		PRESENT EXTRA		RATE (\$)		ADDITIONAL FEE (\$)	
	Total (37 CFR 1.16(i))	*	Minus	**	=			x \$0 =			
	Independent (37 CFR 1.16(h))	*	Minus	***	=			x \$0 =			
	☐ Application Size Fee (37 CFR 1.16(s))										
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))										
								TOTAL ADD'L FEE			
* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.								LIE			
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".								/ANGELA S WHITE/			
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".											
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.											

This collection of information is required by 37 CFR 1.16. 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 12 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, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

<i>Notice of References Cited</i>	Application/Control No. 15/929,609		Applicant(s)/Patent Under Reexamination Karabinis et al.	
	Examiner MICHAEL T VU		Art Unit 2641	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-20020170961-A1	11-2002	Dickson, Bruce	G06Q30/02	235/383
	B					
	C					
	D					
	E					
	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	
	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.

U.S. Patent and Trademark Office
PTO-892 (Rev. 01-2001)

Notice of References Cited

Part of Paper No. 20210515



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/929,609	05/12/2020	Peter D. Karabinis	1348.002US6	1207
138517 7590 06/09/2021 Carlson, Caspers, Vandenburg & Lindquist, P.A. 225 S. Sixth St. Ste. 4200 Minneapolis, MN 55402			EXAMINER VU, MICHAEL T	
			ART UNIT	PAPER NUMBER
			2641	
			NOTIFICATION DATE	DELIVERY MODE
			06/09/2021	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):

docketing@carlsoncaspers.com
eofficeaction@appcoll.com

DETAILED ACTION

Notice of Pre-AIA or AIA Status

1. The present application is being examined under the pre-AIA first to invent provisions.

Terminal Disclaimer

2. Examiner suggests the Assignee must submit the Terminal Disclaimer accordingly, in order to process of the application promptly.

Response to Arguments

3. Applicant's arguments with respect to claims 1, 4-12, and 14-25 have been considered but are moot in view of the new ground(s) of rejection.
4. Applicant amended claims 1, 4-5, 8, and 14.
5. Applicant canceled claims 2-3, and 13.

Claim Rejections - 35 USC § 103

6. In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

7. The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 4-12, 14-25 are rejected under 35 U.S.C. 103 as being unpatentable over Do et al (US 2006/0144933), hereinafter "Do", in view of Clark et al (US 7,624,923), hereinafter "Clark", further in view of Dickson et al (US 2002/0170961), hereinafter "Dickson".

Regarding **claim 1**, Do teaches an apparatus (Figure 7 teaches an apparatus) comprising:

one or more product carrying regions for carrying products for purchase (Figure 7 teaches a shopping cart reads on for carrying products for purchase);

one or more handles for grasping by a customer to move the apparatus around a store (Figure 2A & 2B the apparatus move around for detecting the purchase products); ~~and~~

Do does not explicitly teach **one or more** sensors to detect **one or more** products for purchase placed in the **one or more** product carrying regions; and

Clark, in the same field of endeavor, teaches **one or more** sensors to detect **one or more** products for purchase placed in the **one or more** product carrying regions (col. 1, lines 29-57, and col. 2, lines 35-55 teach the sensor or the RFID that detect the item located in a shopping cart or shopping basket).

Therefore, it would have been obvious before the effective filing date of the claimed invention to one of ordinary skill in the art to provide the above teaching of Do to Clark, in order to provide sensing and indicating of the content to customers while they are shopping at a store such as placed in a customer's shopping cart or shopping basket based on the detected items for influencing the purchasing decisions made by the retail customers (as suggested by Clark in col. 1, lines 12-25).

Do and Clark do not clearly teach a computing system communicatively coupled to the **one or more** sensors, the computing system configured to identify **one or more** products added to the **one or more** product carrying regions based on information from the **one or more** sensors, wherein the computing system is further configured to identify **one or more** products removed from the **one or more** product carrying regions based on information from the **one or more** sensors.

However, Dickson, in the same field of endeavor, teaches a computing system communicatively coupled to the **one or more** sensors (pars [0010-0012] [0016-0019] each a computing system connected to the RFID tags reads on sensor), the computing system configured to identify **one or more** products added to the **one or more** product carrying regions based on information from the **one or more** sensors (pars [0010-0012] [0016-0019] teach the computing system configured to identify and added or removed the products), wherein the computing system is further configured to identify **one or more** products removed from the **one or more** product carrying regions based on information from the **one or more** sensors.

Therefore, it would have been obvious before the effective filing date of the claimed invention to one of ordinary skill in the art to provide the above teaching of Do

and Clark to Dickson, in order to providing helpful shopping assistance to customers using RFID tagged items during the check-out process for convenient to the customer (as suggested by Dickson in paragraphs [0005-0008]).

Regarding **claim 4**, the combination of Do, Clark and Dickson teach the apparatus of claim 2, Do further teaches wherein the computing system is further configured to obtain **at least one** of a weight, manufacturer, expiration date, nutritional value and price of a product (pars [0024-0025] and [0029-0030] teach the price of the item that is being placed in the shopping cart).

Regarding **claim 5**, the combination of Do, Clark and Dickson teach the apparatus of claim 2, Do further teaches wherein the computing system is further configured to initiate a transaction to pay for products in the **one or more** product carrying regions (pars [0025-0026] teach a shopping transaction that placed the item into the shopping cart).

Regarding **claim 6**, the combination of Do, Clark and Dickson teach the apparatus of claim 1, Do further teaches wherein the apparatus is a shopping cart (pars [0025-0026] teach a shopping transaction that placed the item into the shopping cart).

Regarding **claim 7**, the combination of Do, Clark and Dickson teach the apparatus of claim 1, Do further teaches wherein the **one or more** sensors include **one or more** of a radio frequency (RF) tagging sensor, a bar-code sensor, and an image

recognition sensor (Figure 7 teaches the shopping cart, and pars [0028-0030] teach activated by scanning an item's signal or radio tag with bar code reader/magnetic card/smartcard reader module).

Regarding **claim 8**, Do teaches an apparatus (Figure 7 teaches a shopping cart) comprising:

one or more sensors; and

data transfer electronics, communicatively coupled to a processing device and to **one or more** sensors (Figure 7, and pars [0029-0030] teach the radio tag with bar code reader/magnetic card/smartcard reader module), that cause the processing device to: and

obtain **one or more** of a weight (Figure 4 teach the item, price and unit), manufacturer, expiration date, nutritional value **and** price of the object (pars [0029-0030] teach the providing quantitative price data).

Do does not explicitly teach identify an object in the shopping cart based on information from the **one or more** sensors;

Clark, in the same field of endeavor, teaches identify an object in the shopping cart based on information from the **one or more** sensors;

Clark, in the same field of endeavor (col. 1, lines 29-57, and col. 2, lines 35-55 teach the sensor or the RFID that detect the item located in a shopping cart or shopping basket).

Therefore, it would have been obvious before the effective filing date of the claimed invention to one of ordinary skill in the art to provide the above teaching of Do

to Clark, in order to provide sensing and indicating of the content to customers while they are shopping at a store such as placed in a customer's shopping cart or shopping basket based on the detected items for influencing the purchasing decisions made by the retail customers (as suggested by Clark in col. 1, lines 12-25).

Do and Clark do not teach wherein the data transfer electronics cause the processing device to: determine that an object has been added to the shopping cart; and determine that an object has been removed from the shopping cart.

However, Dickson, in the same field of endeavor, teaches wherein the data transfer electronics cause the processing device to: determine that an object has been added to the shopping cart (pars [0010-0012] [0016-0019] teach determine the added product); and determine that an object has been removed from the shopping cart (pars [0010-0012] [0016-0019] teach detecting the added or removed the product).

Therefore, it would have been obvious before the effective filing date of the claimed invention to one of ordinary skill in the art to provide the above teaching of Do and Clark to Dickson, in order to providing helpful shopping assistance to customers using RFID tagged items during the check-out process for convenient to the customer (as suggested by Dickson in paragraphs [0005-0008]).

Regarding **claim 9**, the combination of Do, Clark and Dickson teach the shopping cart of claim 8, Do further teaches wherein the data transfer electronics further cause the processing device to: establish a short-range wireless communications link with the data transfer electronics (pars [0035-0039] teach establish a **short-range wireless interface**); and receive, via the short-range wireless communications link data relating to

at least one of a weight, manufacturer, expiration date, nutritional value and price of the object that is being placed in the shopping cart (pars [0024-0025] and [0029-0030] teach the price of the item that is being placed in the shopping cart).

Regarding **claim 10**, the combination of Do, Clark and Dickson teach the shopping cart of claim 9, Do further teaches wherein the processing device comprises a wireless communications device (pars [0035-0036] teach comprises a wireless communications device).

Regarding **claim 11**, the combination of Do, Clark and Dickson teach the shopping cart of claim 10, Do further teaches wherein the data transfer electronics sends to the wireless communication device data associated with a weight (Figure 4 teaches the item, price, and unit reads on a weight), manufacturer, expiration date, nutritional value and price of the object that is being placed in the shopping cart (pars [0024-0025] and [0029-0030] teach the price of the item that is being placed in the shopping cart).

Regarding **claim 12**, the combination of Do, Clark and Dickson teach the shopping cart of claim 11, Do further teaches wherein the short-range communications link that is established with the wireless communication device is responsive to an action performed by the wireless communications device (pars [0035-0039] teach establish a short-range wireless interface).

Regarding **claim 14**, the combination of Do, Clark and Dickson teach the shopping cart of claim 13, Do further teaches wherein the processing device is enabled to perform a transaction to pay for **one or more** objects that are in the shopping cart (pars [0024-0025] and [0029-0030] teach the price of the item that is being placed in the shopping cart).

Regarding **claim 15**, the combination of Do, Clark and Dickson teach the shopping cart of claim 14, Do further teaches wherein the processing device is enabled to perform the transaction to pay for the **one or more** objects that are in the shopping cart responsive to being proximate to a specific location (pars [0025-0026] teach performing the transaction).

Regarding **claim 16**, the combination of Do, Clark and Dickson teach the shopping cart of claim 15, Do further teaches wherein the specific location comprises a check-out counter (pars [0036-0037] teach check-out).

Regarding **claim 17**, the combination of Do, Clark and Dickson teach the shopping cart of claim 8, Do further teaches wherein the one or more sensors include **one or more** of a radio frequency (RF) tagging sensor, a bar-code sensor, and an image recognition sensor (Figure 7 teaches the shopping cart, and pars [0028-0030] teach activated by scanning an item's signal or radio tag with bar code reader/magnetic card/smartcard reader module).

Regarding **claim 18**, Do teaches a method performed by an apparatus having **one or more** carrying regions for carrying products for purchase (Figure 7 teaches a shopping cart reads on for carrying products for purchase), the method comprising:

detecting **one or more** products for purchase in the **one or more** carrying regions (Figure 7 teaches a shopping cart reads on for carrying products for purchase);

determining, based on the detecting, that **one or more** products has been added to the **one or more** carrying regions;

determining, based on the detecting, that **one or more** products has been removed from the **one or more** carrying regions; and

initiating a transaction to pay for products in the **one or more** product carrying regions (pars [0025-0026] [0045-0047] teach purchase the transaction).

Do does not explicitly teach determining and detecting the products has been added or removed from the carrying regions based on the sensor.

Clark, in the same field of endeavor, teaches determining and detecting the products has been added or removed from the carrying regions based on the sensor (col. 1, lines 29-57, and col. 2, lines 35-55 teach the sensor or the RFID that detect the item located in a shopping cart or shopping basket).

Therefore, it would have been obvious before the effective filing date of the claimed invention to one of ordinary skill in the art to provide the above teaching of Do to Clark, in order to provide sensing and indicating of the content to customers while they are shopping at a store such as placed in a customer's shopping cart or shopping basket based on the detected items for influencing the purchasing decisions made by the retail customers (as suggested by Clark in col. 1, lines 12-25).

Regarding **claim 19**, the combination of Do and Clark teach the method of claim 18, Do further teaches comprising: obtaining **at least one** of a weight, manufacturer, expiration date, nutritional value **or** price of a product in the **one or more** carrying regions (pars [0024-0025] and [0029-0030] teach the price of the item that is being placed in the shopping cart).

Regarding **claim 20**, the combination of Do and Clark teach the method of claim 18, Do further teaches comprising: establishing a short-range communications link with a wireless communication device; and sending to the wireless communication device over the short-range communications link information for **one or more** products in the **one or more** carrying regions (Figure 7 teaches the shopping cart, and pars [0028-0030] teach activated by scanning an item's signal or radio tag with bar code reader/magnetic card/smartcard reader module).

Regarding **claim 21**, the combination of Do and Clark teach the method of claim 20, Do further teaches wherein sending information to the wireless communication device includes sending **one or more** of a weight, manufacturer, expiration date, nutritional value **and/or** price of **one or more** products (pars [0024-0025] and [0029-0030] teach the price of the item that is being placed in the shopping cart).

Regarding **claim 22**, the combination of Do and Clark teach the method of claim 21, Do further teaches wherein sending information to the wireless communication

device includes sending information identifying a product that has been added to or removed from the one or more carrying regions (pars [0024-0025] and [0029-0030] teach the price of the item that is being placed in the shopping cart).

Regarding **claim 23**, the combination of Do and Clark teach the method of claim 18, Do further teaches wherein detecting one or more products includes detecting based upon one or more of a radio frequency (RF) tagging technology, a bar-code technology, and an image recognition technology (Figure 7 teaches the shopping cart, and pars [0028-0030] teach activated by scanning an item's signal or radio tag with bar code reader/magnetic card/smartcard reader module).

Regarding **claim 24**, the combination of Do and Clark teach the method of claim 18, Do further teaches wherein the apparatus is a shopping cart (Figure 7 teach the shopping cart).

Regarding **claim 25**, the combination of Do and Clark teach the method of claim 18, Do further teaches wherein said initiating a transaction occurs responsive to a proximity with a specific location (pars [0020-0021] teach the transaction base on the short range communication reads on a proximity).

9. In response for claim 18, Do indeed teaches a shopping card and detect the product identifier (see Abstract). Do paragraph [0007] teaches detecting a motion across a product identifier in a self-service terminal and monitoring for a product

identifier and detect the product identifier, an alert signal is transmitted which reads on the product has been added or removed from the carrying regions.

Furthermore, Do paragraph [0025] teaches an exemplary use of PSD 202 may be in a retail establishment. Prior to placing an item into their shopping cart 204 as a purchase, a shopper reports the product to the PSD 202 using a bar code reader/magnetic card/smartcard reader module 210, which reads a Universal Product Code (UPC) bar code (or another product identifier) from the product selected by the shopper and records the product in PSD 202. The shopper then places the item into their shopping cart 204. In addition to bar code, magnetic cards, and smartcards, some embodiments of bar code reader/magnetic card/smartcard reader module 210 may be configured to read other forms of non-volatile memory devices, such as compact flash, memory keys, or memory sticks. The PSD 202 stores all items that have been scanned and placed in the shopping cart 204 into a list. In the preferred embodiment, each product identification reader also has the capability to detect that it is in range of a product. For example a barcode scanner may be able to detect that a product is being placed in range of its scanner head. A magnetic card reader will be able to detect that a motion took place at close range. The benefit of this capability will be made clear. When the customer checks out, the checker simply downloads the list (with prices) to conclude **a shopping transaction**. Display system 106 includes both viewing screen 206 and a secondary display unit 208, which may include a light emitting diode bar for emitting signal lights and a speaker system for emitting audible signals. Viewing screen 206 can also serve as input device 118 by serving as a touch screen.

Moreover, Do paragraph [0026] teaches FIG. 3, an exemplary graphical user interface that tracks items that have been previously selected by a shopper is depicted. FIG. 3 illustrates an all items inventory view 300 of items purchased by a user of the personal shopping device 202. All items inventory view 300 includes, for each of several items, a selected item column 302, which lists the item under consideration. Category and subcategory column 304 lists the type of item for each item. Cost column 306 provides a price for the selected item, including any applicable loyalty discounts or coupons. Remove column 310 provides remove buttons 312 for canceling transactions which reads on a transaction to pay for the product in the carrying regions, and further paragraph [0032] teaches a personal shopping device 202 (or peripheral) determining whether a product identifier (e.g. a UPC) has been detected. A product identifier will be detected whenever barcode reader/magnetic card/smartcard reader module 210 reads and identifies a product code from a product. If a product identifier is not detected, the process next moves to step 512, which depicts personal shopping device 202 waiting and monitoring barcode reader/magnetic card/smartcard reader module 210 for to detect a product identifier, and a transaction that appeared to be an attempt at a gathering a product identifier was detected which reads on detecting the product carrying regions and initiating a transaction to pay for products in claim 18.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL T VU whose telephone number is (571)272-8131. The examiner can normally be reached on 8:00AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on 571-272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MICHAEL T VU/
Primary Examiner, Art Unit 2641

<i>Index of Claims</i> 	Application/Control No. 15/929,609	Applicant(s)/Patent Under Reexamination Karabinis et al.
	Examiner MICHAEL T VU	Art Unit 2641

✓	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	06/04/2021								
	1	✓								
	2	-								
	3	-								
	4	✓								
	5	✓								
	6	✓								
	7	✓								
	8	✓								
	9	✓								
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	22	✓								
	23	✓								
	24	✓								
	25	✓								

Search Notes 	Application/Control No. 15/929,609	Applicant(s)/Patent Under Reexamination Karabinis et al.
	Examiner MICHAEL T VU	Art Unit 2641

CPC - Searched*		
Symbol	Date	Examiner
H04W 48/04	06/04/2021	MTV

CPC Combination Sets - Searched*		
Symbol	Date	Examiner

US Classification - Searched*			
Class	Subclass	Date	Examiner

* 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
Inventor: Peter Karabinis	06/04/2021	MTV
Assignee: Telcom Ventures LLC	06/04/2021	MTV
Double Patent Rejected	06/04/2021	MTV
EAST Searched System	06/04/2021	MTV
Telework Covid-19	06/04/2021	MTV

Interference Search			
US Class/CPC Symbol	US Subclass/CPC Group	Date	Examiner

/MICHAEL T VU/ Primary Examiner, Art Unit 2641	
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EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	0	16/012513	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/07/26 18:14
S2	55	sens\$3 near9 (detect\$3 determin\$4) near9 displac\$3 same store	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/07/26 18:16
S3	0	sens\$3 near9 (detect\$3 determin\$4) near9 displac\$3 same store and (RFID tagg\$3 barcode bar-code)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/07/26 18:17
S4	1,033	(detect\$3 determin\$4) near9 (miss\$3 displac\$3) near9 item	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/07/26 18:19
S5	8	(detect\$3 determin\$4) near9 (miss\$3 displac\$3) near9 item same shopping near5 cart	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/07/26 18:22
S6	10	(detect\$3 determin\$4) same (RFID tagg\$3) same (miss\$3 displac\$3) same (shopping adj3 cart)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/07/26 18:27

S7	97	(detect\$3 determin\$4) near9 (miss\$3 displac\$3) near9 item same (warehouse store building)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/07/30 12:40
S8	5	S7 AND ((H04W4/021 OR H04W4/043).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/07/30 12:45
S9	50	S7 AND ((G06F12/1027 OR G06F12/1054 OR G06F17/30132 OR G06F2212/682 OR G06F17/30174 OR G06F17/30575 OR G06F17/30017 OR G06F17/30067 OR G06F17/30215 OR G06F21/50 OR G06F21/88 OR G06F2221/2101 OR G06F2221/2111 OR G06F19/00 OR G06F12/0842 OR G06F12/0864 OR G06F12/121 OR G06F9/30043 OR G06F9/3824 OR G06F12/0804 OR G06F12/082 OR G06F12/0831 OR G06F17/30011 OR G06F17/30023 OR G06F17/30115 OR G06F17/30165 OR G06F17/30233 OR G06F17/30345 OR G06F17/30625 OR G06F17/30631 OR G06F2212/1016 OR G06F2212/604 OR G06F3/14 OR G06F12/0848 OR G06F12/0862 OR G06F12/0866 OR G06F12/0875 OR G06F12/0895 OR G06F12/10 OR G06F12/1018 OR G06F12/12 OR G06F12/1408 OR G06F17/3002 OR G06F17/30035 OR G06F17/30389 OR G06F17/30424 OR G06F17/30442 OR G06F17/30451 OR G06F17/30457 OR G06F17/30477 OR G06F17/30483 OR G06F17/30498 OR G06F17/30516 OR G06F17/30548 OR G06F17/30551 OR G06F17/30554 OR G06F17/30557 OR G06F17/30578 OR G06F17/30616 OR G06F17/30864 OR G06F17/30958 OR G06F19/3418 OR G06F19/3456 OR G06F2212/1021 OR G06F2212/1024	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/07/30 12:45

		OR G06F2212/1052 OR G06F2212/6026 OR G06F2212/608 OR G06F3/0482 OR G06F3/04842 OR G06F3/0619 OR G06F3/0644 OR G06F3/0652 OR G06F3/0665 OR G06F3/0689 OR H04W4/021 OR H04W4/043).CPC.)				
S10	9	S7 AND ((H04W4/021 OR H04W4/043 OR H04B1/713).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/07/30 12:46
S11	50	S7 AND ((G06Q10/087 OR G06Q30/06 OR G06Q10/08 OR G06Q40/02 OR G06Q20/202 OR G06Q20/208 OR G06Q30/0601 OR G06Q20/042 OR G06Q50/22 OR G06Q50/24 OR G06Q30/0611 OR G06Q10/10 OR G06Q30/0207 OR G06Q30/0621 OR G06Q30/0641 OR G06Q40/12 OR G06Q10/083 OR G06Q20/10 OR G06Q30/01 OR G06Q30/0203 OR G06Q30/0223 OR G06Q30/0239 OR G06Q30/0251 OR G06Q30/0255 OR G06Q30/0268 OR G06Q30/0276 OR G06Q30/0623 OR G06Q50/01).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/07/30 12:46
S12	14	S7 AND ((H04L67/1095 OR H04L47/196 OR H04L61/1582 OR H04L67/06 OR H04L67/10 OR H04L67/1023 OR H04L67/104 OR H04L67/108 OR H04L67/1097 OR H04L67/2842 OR H04L25/0226 OR H04L67/02 OR H04L67/2852).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/07/30 12:46
S13	2	(sens\$3 RFID tagg\$3) near8 (item merchandise) near8 (displac\$3 miss\$3) near9 store	USPAT	OR	OFF	2018/07/30 14:08
S14	5	(sens\$3 RFID tagg\$3) near8 (item merchandise) near8 (displac\$3 miss\$3) near9 store	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/07/30 14:09
S15	130	(sens\$3 RFID tagg\$3) same ((charg\$3 pric\$3) near6 (item merchandise)) near8 (cart person people buyer)	US-PGPUB; USPAT; USOCR; FPRS; EPO;	OR	OFF	2018/12/07 16:08

			JPO; DERWENT; IBM_TDB			
S16	29	(sens\$3 RFID tagg\$3) same (phone cellular cell mobile pda iphone ipad) same ((charg\$3 pric\$3) near6 (item merchandise)) near8 (cart person people buyer)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/07 16:11
S17	596	(sens\$3 RFID tagg\$3 link\$3 interfac\$3) same (phone cellular cell mobile pda iphone ipad) near9 (shopping adj2 cart)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/07 16:19
S18	26	(phone cellular cell mobile pda iphone ipad) near9 (shopping adj2 cart) same (check\$3 track\$3) near6 (pric\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/07 16:21
S19	27	(phone cellular cell mobile pda iphone ipad smartphone smart-phone smart-mobile smartmobile) near9 (shopping adj2 cart) same (check\$3 track\$3) near6 (pric\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/07 16:36
S20	2,061	(phone cellular cell mobile pda iphone ipad smartphone smart-phone smart-mobile smartmobile) near9 (shopping adj2 cart)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/07 16:37
S21	511	(phone cellular cell mobile pda iphone ipad smartphone smart-phone smart-mobile smartmobile) near9 (shopping adj2 cart) same (price item)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/07 16:38
S22	249	(phone cellular cell mobile pda iphone ipad smartphone smart-phone smart-mobile smartmobile) near9 (shopping adj2 cart) near9 (price item)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	OFF	2018/12/07 16:38

			DERWENT; IBM_TDB			
S23	33	(phone cellular cell mobile pda iphone ipad smartphone smart- phone smart-mobile smartmobile) near9 (shopping adj2 cart) near9 (detect\$3 track\$3 check\$3) near6 (price item)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/07 16:39
S24	4	"20070129077"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/07 16:44
S25	3	"20070260710"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/07 16:45
S26	403	(phone cellular cell mobile pda iphone ipad smartphone smart- phone smart-mobile smartmobile) same (link\$4 interfac\$3) near9 (shopping adj2 cart)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/07 16:46
S27	115	(phone cellular cell mobile pda iphone ipad smartphone smart- phone smart-mobile smartmobile) near10 (link\$4 interfac\$3) near9 (shopping adj2 cart)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/07 16:49
S28	277	(phone cellular cell mobile pda iphone ipad smartphone smart- phone smart-mobile smartmobile) near10 (link\$4 interfac\$3 (short adj range) RFID) with (shopping adj2 cart)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/08 15:53
S29	433	pay near5 function near8 (mobile pda cell cellular phone iphone ipad)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	OFF	2018/12/10 13:16

			DERWENT; IBM_TDB			
S31	6	"20060085297"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/10 14:54
S32	22,452	(mobile phone cellular iphone) near4 pay\$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/10 14:56
S33	1,065	(mobile phone cellular iphone) near4 pay\$3 same shop\$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/10 14:56
S34	422	(mobile phone cellular iphone) near4 pay\$3 near9 shop\$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/10 14:56
S35	10	(detect\$3 sens\$3) near10 (mobile phone cellular iphone) near4 pay\$3 near9 shop\$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/10 14:57
S36	35	(mobile phone cellular iphone) near4 pay\$3 near9 shop\$4 near2 cart	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/10 14:58
S37	5,080	(mobile phone cellular iphone pd a) near9 (pay\$3 purchas\$3) same shopping	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	OFF	2018/12/10 15:00

			DERWENT; IBM_TDB			
S38	2,484	(mobile phone cellular iphone pda) near9 (pay\$3 purchas\$3) near9 shopping	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/10 15:00
S39	3,575	(mobile phone cellular iphone pda) near9 (pay\$3 paid purchas\$3) near9 item	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/10 15:01
S40	220	(mobile phone cellular iphone pda) near9 (pay\$3 paid purchas\$3) near9 item same (shop\$4 adj cart)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/10 15:02
S41	20	((shopping adj cart) near8 (identity number) near6 assign\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/04/05 14:56
S42	5	((shopping adj cart) near8 (identity number) near6 assign\$3) same (phone smart mobile pda cellular)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/04/05 14:56
S43	20	((shopping adj cart) near8 (identity number) near6 assign\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/04/05 14:59
S44	5	"9474012"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	OFF	2019/04/08 13:24

			DERWENT; IBM_TDB			
S45	12,155	(delet\$3 modif\$3 withdraw\$3 deduct\$3 chang\$3) same (item product) same (mobile phone portable pda iphone smartphone smart-phone)	USPAT	OR	OFF	2019/04/09 11:15
S46	1,885	(delet\$3 modif\$3 withdraw\$3 deduct\$3 chang\$3) with (item product) near10 (mobile phone portable pda iphone smartphone smart-phone)	USPAT	OR	OFF	2019/04/09 11:18
S47	7	(delet\$3 modif\$3 withdraw\$3 deduct\$3 chang\$3) with (item product) near10 (mobile phone portable pda iphone smartphone smart-phone) same (shopp\$3 adj2 cart)	USPAT	OR	OFF	2019/04/09 11:18
S48	7	(delet\$3 modif\$3 withdraw\$3 deduct\$3 chang\$3) with (item product) near10 (mobile phone portable pda iphone smartphone smart-phone) same (shopp\$3 adj2 cart)	USPAT	OR	OFF	2019/04/09 11:20
S49	7	S48 AND ((G06Q30/06 OR G06Q30/0633 OR G06Q30/0641 OR G06Q10/083 OR G06Q30/0635 OR G06Q10/0836 OR G06Q10/087 OR G06Q20/20 OR G06Q20/343 OR G06Q20/36 OR G06Q30/02 OR G06Q30/0211 OR G06Q30/0214 OR G06Q30/0222 OR G06Q30/0224 OR G06Q30/0242 OR G06Q30/0261 OR G06Q30/0267 OR G06Q30/0601 OR G06Q30/0623 OR G06Q30/0625).CPC.)	USPAT	OR	OFF	2019/04/09 11:21
S50	88	(delet\$3 modif\$3 withdraw\$3 deduct\$3 chang\$3) same (item product) same (mobile phone portable pda iphone smartphone smart-phone) same (shopp\$3 adj2 cart)	USPAT	OR	OFF	2019/04/09 11:22
S51	1	16/012513	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/10/18 12:09

S52	13	customer same (short adj range) same (check\$4 adj out)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/10/18 12:12
S53	5	customer same (short adj range) same (check\$4 adj out) same (counter purchas\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/10/18 12:13
S54	13	shopp\$3 same (short adj range) same (check\$4 adj out) same (counter purchas\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/10/18 12:14
S55	43	("20040030601" "20040170430" "20060009234" "20060133633" "20060145893" "20060159260" "20060172700" "20070167147" "20070178935" "20070184837" "20070197261" "20070250393" "20070265984" "20070285280" "20080040274" "20080140868" "20080146148" "20080167966" "20080200166" "20080227471" "20080306868" "20090023474" "20090113543" "20090153367" "20090169070" "20090213947" "20100067591" "20100265845" "20110314539" "20120214443" "20130156218" "6595929" "6769607" "6957107" "7028897" "7133659" "7155199" "7539241" "7822644" "7912629" "8532069" "8646060" "RE39736").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2019/10/18 12:15
S56	280	shopp\$3 same (short adj range) same ((check\$4 adj out) counter purchas\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/10/18 12:19

S57	52	shopp\$3 same (short adj range) same ((check\$4 adj out) counter purchas\$3) near8 store	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/10/18 12:19
S58	111	(phone iphone mobile PDA cellular) same shopp\$3 same (short adj range) same ((check\$4 adj out) counter purchas\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/10/18 12:21
S59	0	(phone iphone mobile PDA cellular) same (shopp\$3 adj card) same (short adj range) same ((check\$4 adj out) counter purchas\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/10/18 13:04
S60	1	(phone iphone mobile PDA cellular) same (shopp\$3 adj card) same (short adj range)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/10/18 13:04
S61	670	(phone iphone mobile PDA cellular) same (wallet basket cart) same (short adj range)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/10/18 13:07
S62	21	(phone iphone mobile PDA cellular) same (wallet basket cart) same (short adj range) same (purchas\$3 near8 store)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/10/18 13:08
S63	6	(phone iphone mobile PDA cellular) same (short adj range) same (wallet basket cart) same (check\$3 adj2 out)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/10/18 13:10

S64	6	(phone iphone mobile PDA cellular) same (short adj range) same (wallet basket cart (carry\$3 near2 structure)) same (check\$3 adj2 out)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/10/18 13:12
S65	3,456	(wallet basket cart (carry\$3 near2 structure)) near9 (check\$3 adj2 out)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/10/18 13:14
S66	1,760	(wallet basket cart (carry\$3 near2 structure)) near9 (check\$3 adj2 out) same purchas\$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/10/18 13:14
S67	254	(wallet basket cart (carry\$3 near2 structure)) near9 (check\$3 adj2 out) same purchas\$3 same pric\$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/10/18 13:15
S68	762	sens\$3 same carry\$3 same (short-range (short adj range))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/12/12 15:06
S69	4	sens\$3 same carry\$3 same (short-range (short adj range)) same (purchas\$3 buy\$3 pay\$3) near6 (product merchant merchandise item)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2019/12/12 15:08
S70	21	sensor same (carry\$3 basket) same (short-range (short adj range)) same (purchas\$3 buy\$3 pay\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2019/12/12 15:10

S71	184	sens\$3 near9 carry\$3 same (short-range (short adj range))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/12/12 15:16
S72	192	sens\$3 near9 (basket carry\$3) same (short-range (short adj range))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/12/12 15:17
S73	59	2004/0143550	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/12/12 15:18
S74	1	10/324537	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/12/12 15:18
S75	2	sens\$3 near9 (basket carry\$3) same (short-range (short adj range)) same (shopp\$3 buy\$3 purchas\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/12/12 15:21
S76	310	sens\$3 same (short-range (short adj range)) same (shopp\$3 buy\$3 purchas\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/12/12 15:25
S77	4	sens\$3 same (short-range (short adj range)) same (shopp\$3 buy\$3 purchas\$3) near9 ((check\$ adj out) checkout)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/12/12 15:27

S78	71	sens\$3 near15 (short-range (short adj range)) same (shopp\$3 buy\$3 purchas\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/12/12 15:27
S81	117	(sensor sens\$3) near15 (shopp\$3 buy\$3 purchas\$3) near8 (store) near9 (mobile cellular portable pda iphone ipad)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2019/12/12 15:32
S82	2	11/040847	USPAT	OR	OFF	2019/12/12 16:56
S83	18	11/040847	US-PGPUB; USPAT	OR	OFF	2019/12/12 16:56
S85	7,393	H04W48/04.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2019/12/13 16:42
S86	117	(sensor sens\$3) near15 (shopp\$3 buy\$3 purchas\$3) near8 (store) near9 (mobile cellular portable pda iphone ipad)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2019/12/13 16:42
S87	0	S85 and S86	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2019/12/13 16:42
S88	86	S86 AND ((G06Q30/02 OR G06Q30/0201 OR G06Q10/10 OR G06Q20/1235 OR G06Q30/06 OR G06Q30/0269 OR G06Q10/087 OR G06Q50/01 OR G06Q30/0261 OR G06Q30/0265 OR G06Q30/0631 OR G06Q30/0267 OR G06Q30/0241 OR G06Q30/0255 OR G06Q20/208 OR G06Q30/0202 OR G06Q30/0601 OR G06Q30/0633 OR G06Q30/0635 OR G06Q10/08 OR G06Q10/0838 OR	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2019/12/13 16:43

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S89	39	S86 AND ((G06F16/9535 OR G06F16/273 OR G06F16/3344 OR G06F16/4387 OR G06F16/4393 OR G06F16/637 OR G06F16/639 OR G06F21/10 OR G06F21/6236 OR G06F2213/0038 OR G06F2216/01 OR G06F2221/2113 OR G06F2221/2137 OR G06F3/14 OR G06F16/24 OR G06F16/24575 OR G06F16/90328 OR G06F17/27 OR G06F3/011 OR G06F3/013 OR G06F8/00 OR G06F16/9537 OR G06F17/5054 OR G06F1/3234 OR G06F21/57 OR G06F21/602 OR G06F21/74 OR G06F21/85 OR G06F2217/78 OR G06F3/0482 OR G06F3/0484 OR G06F3/0485).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2019/12/13 16:43
S90	9	S86 AND ((H04M2203/2044 OR H04M2203/554 OR H04M2203/655 OR H04M2207/18 OR H04M3/42374 OR H04M1/0264).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2019/12/13 16:43
S91	25	S86 AND ((H04W4/16 OR H04W4/029 OR H04W4/80 OR H04W4/21 OR H04W4/50 OR H04W4/70 OR H04W4/12 OR H04W4/02 OR H04W4/023 OR H04W4/60 OR H04W64/00 OR H04W48/16 OR H04W4/021 OR H04W4/06 OR H04W4/18 OR H04W64/006 OR H04W8/22).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2019/12/13 16:43
S92	109	(phone cellular cell mobile pda iphone ipad smartphone smart- phone smart-mobile smartmobile)	US-PGPUB; USPAT; USOCR;	OR	ON	2019/12/13 16:44

		near9 (shopping adj2 cart) near9 (detect\$3 track\$3 check\$3) near6 (price item)	FPRS; EPO; JPO; DERWENT; IBM_TDB			
S93	13	S92 AND ((H04W4/029 OR H04W12/06 OR H04W4/023 OR H04W12/00508 OR H04W4/02 OR H04W4/024 OR H04W4/24 OR H04W4/33).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2019/12/13 16:44
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S104	45	(phone cellular cell mobile pda iphone ipad smartphone smart- phone smart-mobile smartmobile) near9 (shopping adj2 cart) same sens\$3 same (RFID (short adj range))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/03/17 13:36
S105	6	S104 AND ((H04W4/029 OR H04W4/02 OR H04W4/024 OR H04W4/026 OR H04W4/18 OR H04W4/021 OR H04W4/33 OR H04W4/80).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/03/17 13:36
S106	85	("20020007306" "20020008639" "20020084917" "20020085515" "20020087401" "20020099574" "20020109610" "20030014315" "20040181496" "20040226993" "20040252034" "20040254840" "20040260605" "20050168352" "20050228583" "20050229451" "20050258632" "20050280555" "20060010046" "20060072010" "20060095344" "20060116972" "20060143080" "20060170566" "20060212344" "20060250278" "20060260166" "20060267799" "20060283941" "20070001904" "20070050248" "20070129974" "20070257818" "20070290888" "20080030373" "20080033824" "20080136674" "20080291054" "20080308628" "20090067846" "20090077100" "20090099910" "20090204319" "20090276300" "20090313104" "20100029268" "20100064025" "20100070365" "20100191584" "20100282836" "20110004507" "20110015934" "20110060653" "20110082746" "20110295923" "20110320259" "20120092190" "20120095791" "20130103460" "20140207540" "20140337135" "20150066607" "20150294431" "5710743"	US-PGPUB; USPAT; USOCR	OR	OFF	2020/03/17 13:37

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S107	36	S104 AND ((G06Q10/087 OR G06Q30/02 OR G06Q20/208 OR G06Q20/12 OR G06Q30/0633 OR G06Q30/0635 OR G06Q20/327 OR G06Q20/322 OR G06Q20/3224 OR G06Q20/3278 OR G06Q30/0206 OR G06Q30/0211 OR G06Q30/0255 OR G06Q30/0271 OR G06Q30/06 OR G06Q10/0875 OR G06Q20/085 OR G06Q20/202 OR G06Q20/401 OR G06Q30/0207 OR G06Q30/0226 OR G06Q30/0239 OR G06Q30/0251 OR G06Q30/0253 OR G06Q30/0261 OR G06Q30/0267 OR G06Q30/0268 OR G06Q30/0276 OR G06Q30/0277 OR G06Q30/0643 OR G06Q90/20 OR G06Q10/063112 OR G06Q10/06315 OR G06Q10/0833 OR G06Q20/0453 OR G06Q20/145 OR G06Q20/18 OR G06Q20/325 OR G06Q20/3274 OR G06Q30/0201 OR G06Q30/0204 OR G06Q30/0223 OR G06Q30/0234 OR G06Q30/0238 OR G06Q30/0275 OR G06Q30/0601 OR G06Q30/0631 OR G06Q30/0637 OR G06Q30/0641 OR G06Q50/01).CPC.)	US-PGPUB; USPAT; USOCR	OR	OFF	2020/03/17 13:37
S108	3	sens\$3 near9 (detect\$3 determin\$4) same (bought buy purchas\$3 plac\$3) same (shopping adj card)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/03/19 17:10
S109	1	sens\$3 near9 (detect\$3 determin\$4) same (bought buy purchas\$3 plac\$3) same (shopping adj card) same store	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/03/19 17:11

S110	3	("20030158796" "20040262386" "20050071234").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2020/03/19 17:11
S111	2	S108 AND ((G06Q10/087).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/03/19 17:11
S112	2	S108 AND ((G07F9/026).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/03/19 17:11
S113	252	(sensor sens\$3) near15 (shopp\$3 buy\$3 purchas\$3) near8 (store) same (mobile cellular portable pda iphone ipad)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/03/19 17:12
S114	36	S113 AND ((H04W4/029 OR H04W4/80 OR H04W4/02 OR H04W4/70 OR H04W4/12 OR H04W4/18 OR H04W4/21 OR H04W4/50 OR H04W12/06 OR H04W4/023 OR H04W4/16 OR H04W64/00 OR H04W12/001 OR H04W48/16 OR H04W4/021 OR H04W4/024 OR H04W4/026 OR H04W4/06 OR H04W4/60 OR H04W8/22).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/03/19 17:13
S115	0	(sens\$3 RFID tagg\$3 (short adj range)) and (phone cellular cell mobile pda iphone ipad) and (identity near6 (shopping adj card)) and ((charg\$3 pric\$3 paid pay bought checkout check-out) and (plac\$3 put) near9 (shopping adj card)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/03/19 17:17
S116	1	(phone cellular cell mobile pda iphone ipad smartphone smart- phone smart-mobile smartmobile) near9 (shopping adj2 cart) same sens\$3 same (short adj range)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/03/19 17:17

S117	1,365,474	(455/\$.ccls. 370/\$.ccls. 379/\$.ccls. 705/\$.ccls. 709/\$.ccls.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/03/19 17:30
S118	49	(phone cellular cell mobile pda iphone ipad smartphone smart- phone smart-mobile smartmobile) near9 (shopping adj2 cart) same sens\$3 same (RFID Wifi Wi-fi (short adj range))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/03/19 17:31
S119	8	S117 and S118	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/03/19 17:32
S120	1	S119 AND ((H04W4/02 OR H04W4/024 OR H04W4/026 OR H04W4/029 OR H04W4/18).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/03/19 17:32
S121	8	S119 AND ((G06Q30/02 OR G06Q20/202 OR G06Q30/0207 OR G06Q30/0214 OR G06Q30/0223 OR G06Q30/0226 OR G06Q30/0234 OR G06Q30/0238 OR G06Q30/0239 OR G06Q30/0251 OR G06Q30/0253 OR G06Q30/0267 OR G06Q30/0268 OR G06Q30/0276 OR G06Q30/0277 OR G06Q30/0601 OR G06Q30/0633 OR G06Q30/0639 OR G06Q90/20).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/03/19 17:32
S122	3	("7830259" "7937723" "8172096").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2020/03/19 17:32
S123	6,132	((radio adj frequenc\$3) RF tag tagging bar-code (bar adj code) (image adj recognition) sens\$3 sensor) same ((shopping adj basket) (shopping adj cart))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/11/19 15:47

S124	19	((radio adj frequenc\$3) RF tag tagging bar-code (bar adj code) (image adj recognition)) same ((sens\$3 sensor) near6 purchas\$3) same ((shopping adj basket) (shopping adj cart))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/11/19 15:49
S125	61	("20030220105" "20040030601" "20040143505" "20040143550" "20040170430" "20060009234" "20060085297" "20060133633" "20060145893" "20060159260" "20060165060" "20060172700" "20060194538" "20070129077" "20070167147" "20070178935" "20070184837" "20070197261" "20070243872" "20070250393" "20070260710" "20070265984" "20070285280" "20080040274" "20080140667" "20080140868" "20080146148" "20080167966" "20080200166" "20080227471" "20080306868" "20090023474" "20090113543" "20090153367" "20090169070" "20090213947" "20100067591" "20100265845" "20110314539" "20120214443" "20130156218" "6595929" "6769607" "6944981" "6957107" "7028897" "7133659" "7155199" "7503504" "7539241" "7780081" "7822644" "7912629" "8023580" "8091780" "8249935" "8463238" "8532069" "8646060" "8965281" "RE39736").PN.	US-PGPUB; USPAT	OR	OFF	2020/11/23 10:03
S126	4	16/012513	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/11/23 14:04
S127	640	(sensor sens\$2 (radio adj frequency) RF tag\$4 bar-code bar\$code) same ((determin\$4 detect\$3 identif\$4) near9 (remov\$4 add\$4)) same (shop\$4 adj cart)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2021/05/09 21:17

S128	645	(sensor sens\$2 (radio adj frequency) RFID tag\$4 bar-code bar\$code) same ((determin\$4 detect\$3 identif\$4) near9 (remov\$4 add\$4)) same (shop\$4 adj cart)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2021/05/09 21:18
S129	730	(sensor sens\$2 (radio adj frequency) RFID tag\$4 bar-code bar\$code) same (determin\$4 detect\$3 identif\$4) same ((remov\$4 add\$4) near14 (product item merchandis\$4 object)) same (shop\$4 adj cart)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2021/05/09 21:21
S130	450	(sensor sens\$2 (radio adj frequency) RFID tag\$4 bar-code bar\$code) same (determin\$4 detect\$3 identif\$4) near16 ((remov\$4 add\$4) near14 (product item merchandis\$4 object)) same (shop\$4 adj cart)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2021/05/09 21:21
S131	163	S130 AND ((H04W4/029 OR H04W4/02 OR H04W4/80 OR H04W4/023 OR H04W4/025 OR H04W64/006 OR H04W76/10 OR H04W28/0252 OR H04W36/08 OR H04W36/30 OR H04W52/322 OR H04W76/11 OR H04W76/15 OR H04W84/18 OR H04W8/24 OR H04W12/06 OR H04W12/08 OR H04W24/10 OR H04W4/38 OR H04W4/60 OR H04W52/0212 OR H04W52/04 OR H04W64/00 OR H04W64/003 OR H04W88/02 OR H04W8/18 OR H04W4/35 OR H04W28/0231 OR H04W40/02 OR H04W4/021 OR H04W4/33 OR H04W4/70 OR H04W52/223 OR H04W52/40 OR H04W8/183).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2021/05/09 21:23
S132	9	(sensor sens\$2 (radio adj frequency) RFID tag\$4 bar-code bar\$code) same (determin\$4 detect\$3 identif\$4) near16 ((remov\$4 add\$4) near14 (product item merchandis\$4 object)) same (shop\$4 adj cart) same (paid pay\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2021/05/09 21:28
S133	42	S130 AND ((G06F16/955 OR G06F3/0482 OR G06F3/04847 OR G06F3/0488 OR G06F16/535 OR G06F15/76 OR G06F16/2365 OR G06F16/24575 OR G06F16/7837 OR	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	OFF	2021/05/09 21:30

		G06F16/7847 OR G06F16/7854 OR G06F16/786 OR G06F16/93 OR G06F17/18 OR G06F21/31 OR G06F21/316 OR G06F21/36 OR G06F21/54 OR G06F21/552 OR G06F21/554 OR G06F21/604 OR G06F21/62 OR G06F2221/2103 OR G06F2221/2133 OR G06F40/117 OR G06F40/134 OR G06F40/14).CPC.)	DERWENT; IBM_TDB			
S134	90	S130 AND ((G01S5/0289 OR G01S5/14 OR G01S13/82 OR G01S13/878 OR G01S5/0221 OR G01S5/0273 OR G01S5/0284 OR G01S5/04 OR G01S13/886 OR G01S1/68).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2021/05/09 21:30
S135	386	S130 AND ((G06Q10/087 OR G06Q20/208 OR G06Q30/0633 OR G06Q20/12 OR G06Q10/0833 OR G06Q20/20 OR G06Q30/06 OR G06Q20/322 OR G06Q20/326 OR G06Q20/42 OR G06Q20/3276 OR G06Q30/0623 OR G06Q30/0637 OR G06Q10/083 OR G06Q20/327 OR G06Q30/02 OR G06Q10/0836 OR G06Q20/3274 OR G06Q20/3821 OR G06Q20/384 OR G06Q20/385 OR G06Q30/0269 OR G06Q30/0641 OR G06Q30/0643 OR G06Q10/0832 OR G06Q10/0835 OR G06Q20/40145 OR G06Q20/202 OR G06Q20/203 OR G06Q30/0261 OR G06Q30/0635 OR G06Q50/28 OR G06Q20/14 OR G06Q20/201 OR G06Q20/3223 OR G06Q20/325 OR G06Q20/40 OR G06Q30/0251 OR G06Q30/0631 OR G06Q50/01 OR G06Q10/08355 OR G06Q10/0838 OR G06Q20/22 OR G06Q20/308 OR G06Q20/321 OR G06Q20/3221 OR G06Q30/00 OR G06Q30/0267 OR G06Q30/0639 OR G06Q20/085 OR G06Q20/18 OR G06Q20/206 OR G06Q20/209 OR G06Q20/3224 OR G06Q20/3278 OR G06Q20/401 OR G06Q20/4016 OR G06Q30/0601 OR G06Q30/0625 OR G06Q10/06313 OR G06Q10/0637 OR G06Q10/067 OR G06Q10/08 OR G06Q20/047 OR G06Q20/204 OR G06Q20/32 OR G06Q20/387 OR G06Q20/4014 OR G06Q30/016 OR G06Q30/0185 OR G06Q30/0201 OR	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2021/05/09 21:35

		G06Q30/0202 OR G06Q30/0207 OR G06Q30/0224 OR G06Q30/0242 OR G06Q30/0246 OR G06Q30/0282 OR G06Q30/0603 OR G06Q30/0609 OR G06Q30/0613 OR G06Q30/0619 OR G06Q40/123).CPC.)				
S136	386	S130 AND ((G06Q10/087 OR G06Q20/208 OR G06Q30/0633 OR G06Q20/12 OR G06Q10/0833 OR G06Q20/20 OR G06Q30/06 OR G06Q20/322 OR G06Q20/326 OR G06Q20/42 OR G06Q20/3276 OR G06Q30/0623 OR G06Q30/0637 OR G06Q10/083 OR G06Q20/327 OR G06Q30/02 OR G06Q10/0836 OR G06Q20/3274 OR G06Q20/3821 OR G06Q20/384 OR G06Q20/385 OR G06Q30/0269 OR G06Q30/0641 OR G06Q30/0643 OR G06Q10/0832 OR G06Q10/0835 OR G06Q20/40145 OR G06Q20/202 OR G06Q20/203 OR G06Q30/0261 OR G06Q30/0635 OR G06Q50/28 OR G06Q20/14 OR G06Q20/201 OR G06Q20/3223 OR G06Q20/325 OR G06Q20/40 OR G06Q30/0251 OR G06Q30/0631 OR G06Q50/01 OR G06Q10/08355 OR G06Q10/0838 OR G06Q20/22 OR G06Q20/308 OR G06Q20/321 OR G06Q20/3221 OR G06Q30/00 OR G06Q30/0267 OR G06Q30/0639 OR G06Q20/085 OR G06Q20/18 OR G06Q20/206 OR G06Q20/209 OR G06Q20/3224 OR G06Q20/3278 OR G06Q20/401 OR G06Q20/4016 OR G06Q30/0601 OR G06Q30/0625 OR G06Q10/06313 OR G06Q10/0637 OR G06Q10/067 OR G06Q10/08 OR G06Q20/047 OR G06Q20/204 OR G06Q20/32 OR G06Q20/387 OR G06Q20/4014 OR G06Q30/016 OR G06Q30/0185 OR G06Q30/0201 OR G06Q30/0202 OR G06Q30/0207 OR G06Q30/0224 OR G06Q30/0242 OR G06Q30/0246 OR G06Q30/0282 OR G06Q30/0603 OR G06Q30/0609 OR G06Q30/0613 OR G06Q30/0619 OR G06Q40/123 OR H04B1/3822 OR H04B17/3913).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2021/05/09 21:35

6/4/2021 2:55:47 PM

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**Courtesy Reminder for
Application Serial No: 15/929,609**

Attorney Docket No: 1348.002US6

Customer Number: 138517

Date of Electronic Notification: 06/09/2021

This is a courtesy reminder that new correspondence is available for this application. If you have not done so already, please review the correspondence. The official date of notification of the outgoing correspondence will be indicated on the form PTOL-90 accompanying the correspondence.

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 15/929,609
Applicant : Telcom Ventures LLC
Filed : May 12, 2020
Art Unit : 2641
Examiner : Michael T VU
Confirmation No.: 1207
Docket No. : 1348.002US6
Customer No. : 138517
Title : METHOD AND APPARATUS FOR SENSING PRODUCTS FOR
PURCHASE

RESPONSE TO FINAL OFFICE ACTION

Mailstop RCE
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In response to the Final Office Action mailed June 9, 2021, please consider the following:

Amendments to the Claims, beginning at page 2 of this paper; and

Remarks, beginning on page 7 of this paper.

This paper is accompanied by the fee for a 1-month extension of time, extending the period of response from Sept. 9, 2021, to Oct. 9, 2021. Should any other fee be deemed to be due for this filing or any other fees required for the subject application, please charge the appropriate amount to Deposit Account No. 502880.

AMENDMENTS TO THE CLAIMS

Listing of Claims:

1. (Currently Amended) An apparatus comprising:
one or more product carrying regions for carrying products for purchase;
one or more handles for grasping by a customer to move the apparatus around a store;
one or more sensors to detect one or more products for purchase placed in the one or more product carrying regions; and
a computing system communicatively coupled to the one or more sensors, the computing system configured to identify one or more products added to the one or more product carrying regions based on information from the one or more sensors, wherein the computing system is further configured to identify one or more products removed from the one or more product carrying regions based on information from the one or more sensors,
wherein the computing system is further configured to initiate a transaction to pay for products in the one or more product carrying regions.
wherein the system is configured to verify an identify of an individual in connection with the transaction based on sensing a physiological parameter.
2. (Cancelled)
3. (Cancelled)
4. (Previously Presented) The apparatus of claim 1, wherein the computing system is further configured to obtain at least one of a weight, manufacturer, expiration date, nutritional value and price of a product.
5. (Cancelled)
6. (Original) The apparatus of claim 1, wherein the apparatus is a shopping cart.
7. (Original) The apparatus of claim 1, wherein the one or more sensors include one or more of a radio frequency (RF) tagging sensor, a bar-code sensor, and an image recognition sensor.
8. (Currently Amended) A shopping cart comprising:
one or more sensors; and

data transfer electronics, communicatively coupled to a processing device and to one or more sensors, that cause the processing device to:

identify an object in the shopping cart based on information from the one or more sensors; and

obtain one or more of a weight, manufacturer, expiration date, nutritional value and price of the object;

wherein the data transfer electronics cause the processing device to:

determine that an object has been added to the shopping cart; and

determine that an object has been removed from the shopping cart

wherein the processing device is further configured to initiate a transaction to pay for one or more objects that are in the shopping cart.

wherein the processing device is configured to verify an identify of an individual in connection with the transaction based on sensing a physiological parameter.

9. (Original) The shopping cart of claim 8, wherein the data transfer electronics further cause the processing device to:

establish a short-range wireless communications link with the data transfer electronics; and

receive, via the short-range wireless communications link data relating to at least one of a weight, manufacturer, expiration date, nutritional value and price of the object that is being placed in the shopping cart.

10. (Original) The shopping cart of claim 9, wherein the processing device comprises a wireless communications device.

11. (Original) The shopping cart of claim 10, wherein the data transfer electronics sends to the wireless communication device data associated with a weight, manufacturer, expiration date, nutritional value and price of the object that is being placed in the shopping cart.

12. (Original) The shopping cart of claim 11, wherein the short-range communications link that is established with the wireless communication device is responsive to an action performed by the wireless communications device.

13. (Cancelled)
14. (Cancelled)
15. (Currently Amended) The shopping cart of claim 8, wherein the processing device is enabled to perform the transaction to pay for the one or more objects that are in the shopping cart responsive to being proximate to a specific location.
16. (Original) The shopping cart of claim 15, wherein the specific location comprises a check-out counter.
17. (Original) The shopping cart of claim 8, wherein the one or more sensors include one or more of a radio frequency (RF) tagging sensor, a bar-code sensor, and an image recognition sensor.
18. (Currently Amended) A method performed by an apparatus having one or more carrying regions for carrying products for purchase, the method comprising:
detecting one or more products for purchase in the one or more carrying regions;
determining, based on the detecting, that one or more products has been added to the one or more carrying regions;
determining, based on the detecting, that one or more products has been removed from the one or more carrying regions; and
initiating a transaction to pay for products in the one or more product carrying regions;
and
verifying an identify of an individual in connection with the transaction based on sensing a physiological parameter.
19. (Original) The method of claim 18, further comprising:
obtaining at least one of a weight, manufacturer, expiration date, nutritional value or price of a product in the one or more carrying regions.
20. (Original) The method of claim 18, further comprising:
establishing a short-range communications link with a wireless communication device;
and

sending to the wireless communication device over the short-range communications link information for one or more products in the one or more carrying regions.

21. (Original) The method of claim 20, wherein sending information to the wireless communication device includes sending one or more of a weight, manufacturer, expiration date, nutritional value and/or price of one or more products.

22. (Original) The method of claim 21, wherein sending information to the wireless communication device includes sending information identifying a product that has been added to or removed from the one or more carrying regions.

23. (Original) The method of claim 18, wherein detecting one or more products includes detecting based upon one or more of a radio frequency (RF) tagging technology, a bar-code technology, and an image recognition technology.

24. (Original) The method of claim 18, wherein the apparatus is a shopping cart.

25. (Original) The method of claim 18, wherein said initiating a transaction occurs responsive to a proximity with a specific location.

26. (New) The apparatus of claim 1, comprising:
a sensor that senses the physiological parameter.

27. (New) The apparatus of claim 1, comprising:
a wireless communication device configured to communicate with a mobile device, wherein the mobile device senses the physiological parameter to verify the identity of the individual.

28. (New) The shopping cart of claim 8, comprising:
a sensor that senses the physiological parameter.

29. (New) The shopping cart of claim 8, comprising:
a wireless communication device communicatively coupled to the processing device and configured to communicate with a mobile device, wherein the mobile device senses the physiological parameter to verify the identity of the individual.

30. (New) The method of claim 18, comprising:
a sensor that senses the physiological parameter.
31. (New) The method of claim 18, comprising:
communicating with a mobile device, wherein the mobile device senses the physiological
parameter to verify the identity of the individual.

Electronic Acknowledgement Receipt	
EFS ID:	43996271
Application Number:	15929609
International Application Number:	
Confirmation Number:	1207
Title of Invention:	METHOD AND APPARATUS FOR SENSING PRODUCTS FOR PURCHASE
First Named Inventor/Applicant Name:	Peter D. Karabinis
Customer Number:	138517
Filer:	Aaron Wesley Pederson/Sage Kruse
Filer Authorized By:	Aaron Wesley Pederson
Attorney Docket Number:	1348.002US6
Receipt Date:	11-OCT-2021
Filing Date:	12-MAY-2020
Time Stamp:	14:07:07
Application Type:	Utility under 35 USC 111(a)

Payment information:

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Payment Type	DA
Payment was successfully received in RAM	\$840
RAM confirmation Number	E20210AE07341822
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37 CFR 1.19 (Document supply fees)					
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Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		ResptoFOA1348002US6.pdf	83576	yes	8
			e83bc2fb598a2479361f1b2aaf8bf29bb9f32eed		
	Multipart Description/PDF files in .zip description				
	Document Description		Start	End	
	Amendment Submitted/Entered with Filing of CPA/RCE		1	1	
	Claims		2	6	
	Applicant Arguments/Remarks Made in an Amendment		7	8	
Warnings:					
Information:					
2	Request for Continued Examination (RCE)	RCE1348002US6.pdf	1349929	no	3
			13c104f12f0577b34947757f7c8bbaace0fbff4		
Warnings:					
Information:					
3	Fee Worksheet (SB06)	fee-info.pdf	43094	no	2
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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.

National Stage of an International Application under 35 U.S.C. 371

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.

New International Application Filed with the USPTO as a Receiving Office

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.

Doc code: RCEX

PTO/SB/30EFS (02-18)

Doc description: Request for Continued Examination (RCE)

Approved for use through 11/30/2020. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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**REQUEST FOR CONTINUED EXAMINATION(RCE)TRANSMITTAL
(Submitted Only via EFS-Web)**

Application Number	15929609	Filing Date	2020-05-12	Docket Number (if applicable)	1348.002US6	Art Unit	2641
First Named Inventor	Peter D. Karabinis			Examiner Name	Michael T. Vu		

This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application.
Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application. The Instruction Sheet for this form is located at WWW.USPTO.GOV

SUBMISSION REQUIRED UNDER 37 CFR 1.114

Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s).

☐ Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.

☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on _____

☐ Other _____

☒ Enclosed

☒ Amendment/Reply

☐ Information Disclosure Statement (IDS)

☐ Affidavit(s)/ Declaration(s)

☐ Other _____

MISCELLANEOUS

☐ Suspension of action on the above-identified application is requested under 37 CFR 1.103(c) for a period of months _____
(Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(i) required)

☐ Other _____

FEES

☒ The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.
The Director is hereby authorized to charge any underpayment of fees, or credit any overpayments, to
Deposit Account No 502880

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

☒ Patent Practitioner Signature
Applicant Signature

Doc code: RCEX

Doc description: Request for Continued Examination (RCE)

PTO/SB/30EFS (02-18)

Approved for use through 11/30/2020. OMB 0651-0031

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Signature of Registered U.S. Patent Practitioner			
Signature	Aaron W. Pederson/	Date (YYYY-MM-DD)	2021-10-11
Name	Aaron W. Pederson	Registration Number	58607

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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 inspections 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.

REMARKS

This paper is responsive to the Final Office Action dated June 9, 2021 wherein claims 1, 4-12 and 14-25 were pending and rejected. With this paper, claims 1, 8, and 18 are amended, claims 5 and 14 are cancelled, and new claims 26-31 are added. No new matter has been added. Upon entry, claims 1, 4, 6-12, and 15-31 will remain pending in this application. Reconsideration and further prosecution of the present application is respectfully requested.

Rejections Under 35 U.S.C. § 103

Claims 1, 4-12 and 14-25 were rejected under 35 USC § 103 as being unpatentable over Do et al (US 2006/0144933) in view of Clark et al. (US 7,624,923), and further in view of Dickson et al. (US 2002/0170961). Applicant respectfully traverses these rejections.

Amended claim 1 recites in pertinent part “wherein the system is configured to verify an identify of an individual in connection with the transaction based on sensing a physiological parameter”. None of Do, Clark, or Dickson teaches or suggests verifying an identify of an individual in connection with a transaction based on a physiological parameter. Claims 8 and 18 include similar limitations to claim 1.

For these reasons, Applicant respectfully asserts that the combination of Do, Clark, and Dickson does not teach or suggest each and every limitation of independent claims 1, 8, and 18. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejection of claims 1, 8, and 18 under 35 USC § 103 with respect to Do, Clark, and Dickson.

Claims 4, 6, 7, 9-12, 15-17, and 19-31 variously depend from or contain similar language to claims 1, 8, and 18. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejection of these claims for the reasons provided above with respect to claims 1, 8, and 18.

Application No. 15/929,609
Response to Final Office Action mailed June 9, 2021

SUMMARY

For the reasons set out above, Applicant respectfully submits that the application is in condition for allowance. Favorable reconsideration and allowance of the application are, therefore, respectfully requested.

If the Examiner believes that anything further is necessary to place the application in better condition for allowance, the Examiner is asked to contact Applicant's undersigned representative at the telephone number below.

Customer No. 138517

Respectfully submitted,

Date: Oct. 11, 2021

/Aaron W. Pederson/

Attorneys for Applicant
Carlson, Caspers, Vandenburg &
Lindquist, P.A.
225 S. Sixth St., Ste. 4200
Minneapolis, Minnesota 55402

Aaron Pederson
Registration No. 58607
Tel No. (612) 436-9609

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875				Application or Docket Number 15/929,609		Filing Date 05/12/2020		☐ To be Mailed			
ENTITY: ☐ LARGE ☒ SMALL ☐ MICRO											
APPLICATION AS FILED - PART I											
		(Column 1)		(Column 2)							
FOR		NUMBER FILED		NUMBER EXTRA		RATE (\$)		FEE (\$)			
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))		N/A		N/A		N/A					
☐ SEARCH FEE (37 CFR 1.16(k), (l), or (m))		N/A		N/A		N/A					
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))		N/A		N/A		N/A					
TOTAL CLAIMS (37 CFR 1.16(i))		minus 20 = *				x \$50 =					
INDEPENDENT CLAIMS (37 CFR 1.16(h))		minus 3 = *				x \$230 =					
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))		If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).									
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))											
* If the difference in column 1 is less than zero, enter "0" in column 2.						TOTAL					
APPLICATION AS AMENDED - PART II											
		(Column 1)		(Column 2)		(Column 3)					
AMENDMENT	10/11/2021	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR		PRESENT EXTRA		RATE (\$)		ADDITIONAL FEE (\$)	
	Total (37 CFR 1.16(i))	* 26	Minus	** 25	= 1			x \$50 =		50	
	Independent (37 CFR 1.16(h))	* 3	Minus	*** 3	= 0			x \$240 =		0	
	☐ Application Size Fee (37 CFR 1.16(s))										
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))										
								TOTAL ADD'L FEE		50	
AMENDMENT		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR		PRESENT EXTRA		RATE (\$)		ADDITIONAL FEE (\$)	
	Total (37 CFR 1.16(i))	*	Minus	**	=			x \$0 =			
	Independent (37 CFR 1.16(h))	*	Minus	***	=			x \$0 =			
	☐ Application Size Fee (37 CFR 1.16(s))										
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))										
								TOTAL ADD'L FEE			
* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.								LIE			
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".								/CHANTAE S DESSAU/			
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".											
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.											

This collection of information is required by 37 CFR 1.16. 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 12 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, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Electronic Patent Application Fee Transmittal				
Application Number:		15929609		
Filing Date:		12-May-2020		
Title of Invention:		METHOD AND APPARATUS FOR SENSING PRODUCTS FOR PURCHASE		
First Named Inventor/Applicant Name:		Peter D. Karabinis		
Filer:		Aaron Wesley Pederson/Sage Kruse		
Attorney Docket Number:		1348.002US6		
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:				
CLAIMS IN EXCESS OF 20	2202	1	50	50
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Extension-of-Time:				
Extension - 1 month with \$0 paid	2251	1	110	110
Miscellaneous:				
RCE- 1ST REQUEST	2801	1	680	680
Total in USD (\$)				840

Doc Code: DISQ.E.FILE

Document Description: Electronic Terminal Disclaimer – Approved

Application No.: 15929609

Filing Date: 12-May-2020

Applicant/Patent under Reexamination: Karabinis

Electronic Terminal Disclaimer filed on November 23, 2021

☒ APPROVED

This patent is subject to a terminal disclaimer

☐ DISAPPROVED

Approved/Disapproved by: Electronic Terminal Disclaimer automatically approved by EFS-Web

U.S. Patent and Trademark Office

Doc Code: DIST.E.FILE Document Description: Electronic Terminal Disclaimer - Filed		PTO/SB/26 U.S. Patent and Trademark Office Department of Commerce	
Electronic Petition Request	TERMINAL DISCLAIMER TO OBTAIN A DOUBLE PATENTING REJECTION OVER A "PRIOR" PATENT		
Application Number	15929609		
Filing Date	12-May-2020		
First Named Inventor	Peter Karabinis		
Attorney Docket Number	1348.002US6		
Title of Invention	METHOD AND APPARATUS FOR SENSING PRODUCTS FOR PURCHASE		
☒ Filing of terminal disclaimer does not obviate requirement for response under 37 CFR 1.111 to outstanding Office Action ☒ This electronic Terminal Disclaimer is not being used for a Joint Research Agreement.			
Owner		Percent Interest	
Telcom Ventures, LLC		100%	
The owner(s) with percent interest listed above in the instant application hereby disclaims, except as provided below, the terminal part of the statutory term of any patent granted on the instant application which would extend beyond the expiration date of the full statutory term of prior patent number(s) 10660015 as the term of said prior patent is presently shortened by any terminal disclaimer. The owner hereby agrees that any patent so granted on the instant application shall be enforceable only for and during such period that it and the prior patent are commonly owned. This agreement runs with any patent granted on the instant application and is binding upon the grantee, its successors or assigns. In making the above disclaimer, the owner does not disclaim the terminal part of the term of any patent granted on the instant application that would extend to the expiration date of the full statutory term of the prior patent, "as the term of said prior patent is presently shortened by any terminal disclaimer," in the event that said prior patent later: - expires for failure to pay a maintenance fee; - is held unenforceable; - is found invalid by a court of competent jurisdiction; - is statutorily disclaimed in whole or terminally disclaimed under 37 CFR 1.321; - has all claims canceled by a reexamination certificate; - is reissued; or - is in any manner terminated prior to the expiration of its full statutory term as presently shortened by any terminal disclaimer. ☒ Terminal disclaimer fee under 37 CFR 1.20(d) is included with Electronic Terminal Disclaimer request.			

☐ I certify, in accordance with 37 CFR 1.4(d)(4), that the terminal disclaimer fee under 37 CFR 1.20(d) required for this terminal disclaimer has already been paid in the above-identified application.	
Applicant claims the following fee status:	
☒ Small Entity ☐ Micro Entity ☐ Regular Undiscounted	
I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.	
THIS PORTION MUST BE COMPLETED BY THE SIGNATORY OR SIGNATORIES	
I certify, in accordance with 37 CFR 1.4(d)(4) that I am:	
☒ An attorney or agent registered to practice before the Patent and Trademark Office who is of record in this application Registration Number <u>58607</u>	
☐ A sole inventor	
☐ A joint inventor; I certify that I am authorized to sign this submission on behalf of all of the inventors as evidenced by the power of attorney in the application	
☐ A joint inventor; all of whom are signing this request	
Signature	/Aaron W. Pederson/
Name	Aaron Pederson

*Statement under 37 CFR 3.73(b) is required if terminal disclaimer is signed by the assignee (owner).
 Form PTO/SB/96 may be used for making this certification. See MPEP § 324.

Electronic Acknowledgement Receipt	
EFS ID:	44354304
Application Number:	15929609
International Application Number:	
Confirmation Number:	1207
Title of Invention:	METHOD AND APPARATUS FOR SENSING PRODUCTS FOR PURCHASE
First Named Inventor/Applicant Name:	Peter D. Karabinis
Customer Number:	138517
Filer:	Aaron Wesley Pederson/Sage Kruse
Filer Authorized By:	Aaron Wesley Pederson
Attorney Docket Number:	1348.002US6
Receipt Date:	23-NOV-2021
Filing Date:	12-MAY-2020
Time Stamp:	14:53:02
Application Type:	Utility under 35 USC 111(a)

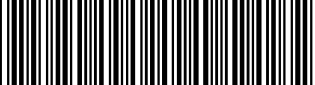
Payment information:

Submitted with Payment	yes
Payment Type	DA
Payment was successfully received in RAM	\$ 170
RAM confirmation Number	E2021AME52581034
Deposit Account	502880
Authorized User	Sage Kruse
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows: 37 CFR 1.16 (National application filing, search, and examination fees) 37 CFR 1.17 (Patent application and reexamination processing fees)	

37 CFR 1.19 (Document supply fees)					
37 CFR 1.20 (Post Issuance fees)					
37 CFR 1.21 (Miscellaneous fees and charges)					
File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Terminal Disclaimer-Filed (Electronic)	eTerminal-Disclaimer.pdf	41345	no	2
			a3119fa7673d73b44019a99676c888ece8e bc3d6		
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	38008	no	2
			10986e9bec8a9de0f23ae986aa6b61c4bae e6086		
Warnings:					
Information:					
Total Files Size (in bytes):			79353		
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.					

Electronic Patent Application Fee Transmittal				
Application Number:		15929609		
Filing Date:		12-May-2020		
Title of Invention:		METHOD AND APPARATUS FOR SENSING PRODUCTS FOR PURCHASE		
First Named Inventor/Applicant Name:		Peter D. Karabinis		
Filer:		Aaron Wesley Pederson/Sage Kruse		
Attorney Docket Number:		1348.002US6		
Filed as Small Entity				
Filing Fees for Utility under 35 USC 111(a)				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
STATUTORY OR TERMINAL DISCLAIMER	2814	1	170	170
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Extension-of-Time:				
Miscellaneous:				
Total in USD (\$)				170

Issue Classification 	Application/Control No. 15/929,609	Applicant(s)/Patent Under Reexamination Karabinis et al.
	Examiner MICHAEL T VU	Art Unit 2641

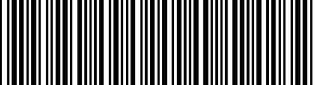
CPC						
Symbol					Type	Version
H04W	/	48	/	04	F	2013-01-01
H04W	/	4	/	029	I	2018-02-01
G06Q	/	30	/	0601	I	2013-01-01
H04W	/	4	/	023	I	2013-01-01
H04L	/	67	/	18	I	2013-01-01
H04W	/	4	/	80	I	2018-02-01
H04W	/	76	/	10	I	2018-02-01
H04W	/	88	/	06	A	2013-01-01

CPC Combination Sets					
Symbol				Type	Set
	/		/		

NONE		Total Claims Allowed:	
(Assistant Examiner)	(Date)	26	
/MICHAEL T VU/ Primary Examiner, Art Unit 2641 (Primary Examiner)	30 November 2021 (Date)	O.G. Print Claim(s) 1	O.G. Print Figure 1

U.S. Patent and Trademark Office

Part of Paper No.: 20211130

Issue Classification 	Application/Control No. 15/929,609	Applicant(s)/Patent Under Reexamination Karabinis et al.
	Examiner MICHAEL T VU	Art Unit 2641

INTERNATIONAL CLASSIFICATION			
CLAIMED			
H04W	/	4	/ 02

NON-CLAIMED			
/		/	

US ORIGINAL CLASSIFICATION	
CLASS	SUBCLASS

CROSS REFERENCES(S)						
CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)					

NONE		Total Claims Allowed:	
(Assistant Examiner)	(Date)	26	
/MICHAEL T VU/ Primary Examiner, Art Unit 2641 (Primary Examiner)	30 November 2021 (Date)	O.G. Print Claim(s) 1	O.G. Print Figure 1

U.S. Patent and Trademark Office

Part of Paper No.: 20211130

Issue Classification 	Application/Control No. 15/929,609	Applicant(s)/Patent Under Reexamination Karabinis et al.
	Examiner MICHAEL T VU	Art Unit 2641

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☒ T.D. ☐ R.1.47
--

CLAIMS															
Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original
1	1	9	10	18	19	15	28								
	2	10	11	19	20	16	29								
	3	11	12	20	21	25	30								
2	4		13	21	22	26	31								
	5		14	22	23										
3	6	12	15	23	24										
4	7	13	16	24	25										
7	8	14	17	5	26										
8	9	17	18	6	27										

NONE (Assistant Examiner) _____ (Date) _____		Total Claims Allowed: 26	
/MICHAEL T VU/ Primary Examiner, Art Unit 2641 (Primary Examiner) _____ (Date) _____		30 November 2021 (Date)	O.G. Print Claim(s) 1
			O.G. Print Figure 1

U.S. Patent and Trademark Office

Part of Paper No.: 20211130



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

138517 7590 12/09/2021
Carlson, Caspers, Vandenberg & Lindquist, P.A.
225 S. Sixth St.
Ste. 4200
Minneapolis, MN 55402

EXAMINER

VU, MICHAEL T

ART UNIT

PAPER NUMBER

2641

DATE MAILED: 12/09/2021

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/929,609	05/12/2020	Peter D. Karabinis	1348.002US6	1207

TITLE OF INVENTION: METHOD AND APPARATUS FOR SENSING PRODUCTS FOR PURCHASE

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	03/09/2022

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE 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.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the ENTITY STATUS shown above. If the ENTITY STATUS is shown as SMALL or MICRO, verify whether entitlement to that entity status still applies.

If the ENTITY STATUS is the same as shown above, pay the TOTAL FEE(S) DUE shown above.

If the ENTITY STATUS is changed from that shown above, on PART B - FEE(S) TRANSMITTAL, complete section number 5 titled "Change in Entity Status (from status indicated above)".

For purposes of this notice, small entity fees are 1/2 the amount of undiscounted fees, and micro entity fees are 1/2 the amount of small entity fees.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Maintenance fees are due in utility patents issuing on applications filed on or after Dec. 12, 1980. It is patentee's responsibility to ensure timely payment of maintenance fees when due. More information is available at www.uspto.gov/PatentMaintenanceFees.

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)

138517 7590 12/09/2021
Carlson, Caspers, Vandenburg & Lindquist, P.A.
225 S. Sixth St.
Ste. 4200
Minneapolis, MN 55402

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.

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.
15/929,609	05/12/2020	Peter D. Karabinis	1348.002US6	1207

TITLE OF INVENTION: METHOD AND APPARATUS FOR SENSING PRODUCTS FOR PURCHASE

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	03/09/2022

EXAMINER	ART UNIT	CLASS-SUBCLASS
VU, MICHAEL T	2641	455-456300

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. _____



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
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P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/929,609	05/12/2020	Peter D. Karabinis	1348.002US6	1207
138517	7590	12/09/2021	EXAMINER	
Carlson, Caspers, Vandenburg & Lindquist, P.A. 225 S. Sixth St. Ste. 4200 Minneapolis, MN 55402			VU, MICHAEL T	
			ART UNIT	PAPER NUMBER
			2641	

DATE MAILED: 12/09/2021

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); (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. 15/929,609	Applicant(s) Karabinis et al.	
	Examiner MICHAEL T VU	Art Unit 2641	AIA (FITF) Status No

-- 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 10/11/2021.
☐ 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 1,4,6-12 and 15-31. 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)	5. ☐ Examiner's Amendment/Comment
2. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____.	6. ☒ Examiner's Statement of Reasons for Allowance
3. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material _____.	7. ☐ Other _____.
4. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____.	

/MICHAEL T VU/ Primary Examiner, Art Unit 2641	
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DETAILED ACTION

Notice of Pre-AIA or AIA Status

1. The present application is being examined under the pre-AIA first to invent provisions.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/11/2021 has been entered.

Terminal Disclaimer

3. The terminal disclaimer filed on 11/23/2021 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of 11/04/2008 (see Date of Continuation on BIB) has been reviewed and is accepted. The terminal disclaimer has been recorded, and approved.

Allowable Subject Matter

4. **Claims 1, 4, 6-12, 15-31** are allowed.
5. The following is an examiner's statement of reasons for allowance:

With respect to claims 1, 8, and 18, the closest prior art record, Do (US 2006/0144933) teaches an apparatus comprising:

one or more product carrying regions for carrying products for purchase;

one or more handles for grasping by a customer to move the apparatus around a store;

However, Do alone or in combination fails teaches or fairly suggest;

one or more sensors to detect one or more products for purchase placed in the one or more product carrying regions; and

a computing system communicatively coupled to the one or more sensors, the computing system configured to identify one or more products added to the one or more product carrying regions based on information from the one or more sensors, wherein the computing system is further configured to identify one or more products removed from the one or more product carrying regions based on information from the one or more sensors,

wherein the computing system is further configured to initiate a transaction to pay for products in the one or more product carrying regions,

wherein the system is configured to verify an identify of an individual in connection with the transaction based on sensing a physiological parameter.

Dependent claims 4, 6-7, 9-12, 15-17, and 19-31 are allowable for the same reason as set forth above.

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".

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL T VU whose telephone number is (571)272-8131. The examiner can normally be reached on 8:00AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles N. Appiah can be reached on 571-272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-272-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/MICHAEL T VU/
Primary Examiner, Art Unit 2641

Search Notes 	Application/Control No. 15/929,609	Applicant(s)/Patent Under Reexamination Karabinis et al.
	Examiner MICHAEL T VU	Art Unit 2641

CPC - Searched*		
Symbol	Date	Examiner
H04W 48/04	11/30/2021	MTV

CPC Combination Sets - Searched*		
Symbol	Date	Examiner

US Classification - Searched*			
Class	Subclass	Date	Examiner

* 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
Inventor: Peter Karabinis	11/30/2021	MTV
Assignee: Telcom Ventures LLC	11/30/2021	MTV
Double Patent Rejected, TD Approved 11/23/2021	11/30/2021	MTV
EAST Searched System	11/30/2021	MTV
Telework Covid-19	11/30/2021	MTV

Interference Search			
US Class/CPC Symbol	US Subclass/CPC Group	Date	Examiner
Interference	Text Searched	11/30/2021	MTV

/MICHAEL T VU/ Primary Examiner, Art Unit 2641	
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EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	0	16/012513	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/07/26 18:14
S2	55	sens\$3 near9 (detect\$3 determin\$4) near9 displac\$3 same store	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/07/26 18:16
S3	0	sens\$3 near9 (detect\$3 determin\$4) near9 displac\$3 same store and (RFID tagg\$3 barcode bar-code)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/07/26 18:17
S4	1,033	(detect\$3 determin\$4) near9 (miss\$3 displac\$3) near9 item	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/07/26 18:19
S5	8	(detect\$3 determin\$4) near9 (miss\$3 displac\$3) near9 item same shopping near5 cart	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/07/26 18:22
S6	10	(detect\$3 determin\$4) same (RFID tagg\$3) same (miss\$3 displac\$3) same (shopping adj3 cart)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/07/26 18:27

S7	97	(detect\$3 determin\$4) near9 (miss\$3 displac\$3) near9 item same (warehouse store building)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/07/30 12:40
S8	5	S7 AND ((H04W4/021 OR H04W4/043).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/07/30 12:45
S9	50	S7 AND ((G06F12/1027 OR G06F12/1054 OR G06F17/30132 OR G06F2212/682 OR G06F17/30174 OR G06F17/30575 OR G06F17/30017 OR G06F17/30067 OR G06F17/30215 OR G06F21/50 OR G06F21/88 OR G06F2221/2101 OR G06F2221/2111 OR G06F19/00 OR G06F12/0842 OR G06F12/0864 OR G06F12/121 OR G06F9/30043 OR G06F9/3824 OR G06F12/0804 OR G06F12/082 OR G06F12/0831 OR G06F17/30011 OR G06F17/30023 OR G06F17/30115 OR G06F17/30165 OR G06F17/30233 OR G06F17/30345 OR G06F17/30625 OR G06F17/30631 OR G06F2212/1016 OR G06F2212/604 OR G06F3/14 OR G06F12/0848 OR G06F12/0862 OR G06F12/0866 OR G06F12/0875 OR G06F12/0895 OR G06F12/10 OR G06F12/1018 OR G06F12/12 OR G06F12/1408 OR G06F17/3002 OR G06F17/30035 OR G06F17/30389 OR G06F17/30424 OR G06F17/30442 OR G06F17/30451 OR G06F17/30457 OR G06F17/30477 OR G06F17/30483 OR G06F17/30498 OR G06F17/30516 OR G06F17/30548 OR G06F17/30551 OR G06F17/30554 OR G06F17/30557 OR G06F17/30578 OR G06F17/30616 OR G06F17/30864 OR G06F17/30958 OR G06F19/3418 OR G06F19/3456 OR G06F2212/1021 OR G06F2212/1024	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/07/30 12:45

		OR G06F2212/1052 OR G06F2212/6026 OR G06F2212/608 OR G06F3/0482 OR G06F3/04842 OR G06F3/0619 OR G06F3/0644 OR G06F3/0652 OR G06F3/0665 OR G06F3/0689 OR H04W4/021 OR H04W4/043).CPC.)				
S10	9	S7 AND ((H04W4/021 OR H04W4/043 OR H04B1/713).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/07/30 12:46
S11	50	S7 AND ((G06Q10/087 OR G06Q30/06 OR G06Q10/08 OR G06Q40/02 OR G06Q20/202 OR G06Q20/208 OR G06Q30/0601 OR G06Q20/042 OR G06Q50/22 OR G06Q50/24 OR G06Q30/0611 OR G06Q10/10 OR G06Q30/0207 OR G06Q30/0621 OR G06Q30/0641 OR G06Q40/12 OR G06Q10/083 OR G06Q20/10 OR G06Q30/01 OR G06Q30/0203 OR G06Q30/0223 OR G06Q30/0239 OR G06Q30/0251 OR G06Q30/0255 OR G06Q30/0268 OR G06Q30/0276 OR G06Q30/0623 OR G06Q50/01).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/07/30 12:46
S12	14	S7 AND ((H04L67/1095 OR H04L47/196 OR H04L61/1582 OR H04L67/06 OR H04L67/10 OR H04L67/1023 OR H04L67/104 OR H04L67/108 OR H04L67/1097 OR H04L67/2842 OR H04L25/0226 OR H04L67/02 OR H04L67/2852).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/07/30 12:46
S13	2	(sens\$3 RFID tagg\$3) near8 (item merchandise) near8 (displac\$3 miss\$3) near9 store	USPAT	OR	OFF	2018/07/30 14:08
S14	5	(sens\$3 RFID tagg\$3) near8 (item merchandise) near8 (displac\$3 miss\$3) near9 store	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/07/30 14:09
S15	130	(sens\$3 RFID tagg\$3) same ((charg\$3 pric\$3) near6 (item merchandise)) near8 (cart person people buyer)	US-PGPUB; USPAT; USOCR; FPRS; EPO;	OR	OFF	2018/12/07 16:08

			JPO; DERWENT; IBM_TDB			
S16	29	(sens\$3 RFID tagg\$3) same (phone cellular cell mobile pda iphone ipad) same ((charg\$3 pric\$3) near6 (item merchandise)) near8 (cart person people buyer)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/07 16:11
S17	596	(sens\$3 RFID tagg\$3 link\$3 interfac\$3) same (phone cellular cell mobile pda iphone ipad) near9 (shopping adj2 cart)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/07 16:19
S18	26	(phone cellular cell mobile pda iphone ipad) near9 (shopping adj2 cart) same (check\$3 track\$3) near6 (pric\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/07 16:21
S19	27	(phone cellular cell mobile pda iphone ipad smartphone smart-phone smart-mobile smartmobile) near9 (shopping adj2 cart) same (check\$3 track\$3) near6 (pric\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/07 16:36
S20	2,061	(phone cellular cell mobile pda iphone ipad smartphone smart-phone smart-mobile smartmobile) near9 (shopping adj2 cart)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/07 16:37
S21	511	(phone cellular cell mobile pda iphone ipad smartphone smart-phone smart-mobile smartmobile) near9 (shopping adj2 cart) same (price item)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/07 16:38
S22	249	(phone cellular cell mobile pda iphone ipad smartphone smart-phone smart-mobile smartmobile) near9 (shopping adj2 cart) near9 (price item)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	OFF	2018/12/07 16:38

			DERWENT; IBM_TDB			
S23	33	(phone cellular cell mobile pda iphone ipad smartphone smart- phone smart-mobile smartmobile) near9 (shopping adj2 cart) near9 (detect\$3 track\$3 check\$3) near6 (price item)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/07 16:39
S24	4	"20070129077"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/07 16:44
S25	3	"20070260710"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/07 16:45
S26	403	(phone cellular cell mobile pda iphone ipad smartphone smart- phone smart-mobile smartmobile) same (link\$4 interfac\$3) near9 (shopping adj2 cart)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/07 16:46
S27	115	(phone cellular cell mobile pda iphone ipad smartphone smart- phone smart-mobile smartmobile) near10 (link\$4 interfac\$3) near9 (shopping adj2 cart)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/07 16:49
S28	277	(phone cellular cell mobile pda iphone ipad smartphone smart- phone smart-mobile smartmobile) near10 (link\$4 interfac\$3 (short adj range) RFID) with (shopping adj2 cart)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/08 15:53
S29	433	pay near5 function near8 (mobile pda cell cellular phone iphone ipad)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	OFF	2018/12/10 13:16

			DERWENT; IBM_TDB			
S31	6	"20060085297"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/10 14:54
S32	22,452	(mobile phone cellular iphone) near4 pay\$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/10 14:56
S33	1,065	(mobile phone cellular iphone) near4 pay\$3 same shop\$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/10 14:56
S34	422	(mobile phone cellular iphone) near4 pay\$3 near9 shop\$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/10 14:56
S35	10	(detect\$3 sens\$3) near10 (mobile phone cellular iphone) near4 pay\$3 near9 shop\$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/10 14:57
S36	35	(mobile phone cellular iphone) near4 pay\$3 near9 shop\$4 near2 cart	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/10 14:58
S37	5,080	(mobile phone cellular iphone pd a) near9 (pay\$3 purchas\$3) same shopping	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	OFF	2018/12/10 15:00

			DERWENT; IBM_TDB			
S38	2,484	(mobile phone cellular iphone pda) near9 (pay\$3 purchas\$3) near9 shopping	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/10 15:00
S39	3,575	(mobile phone cellular iphone pda) near9 (pay\$3 paid purchas\$3) near9 item	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/10 15:01
S40	220	(mobile phone cellular iphone pda) near9 (pay\$3 paid purchas\$3) near9 item same (shop\$4 adj cart)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/10 15:02
S41	20	((shopping adj cart) near8 (identity number) near6 assign\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/04/05 14:56
S42	5	((shopping adj cart) near8 (identity number) near6 assign\$3) same (phone smart mobile pda cellular)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/04/05 14:56
S43	20	((shopping adj cart) near8 (identity number) near6 assign\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/04/05 14:59
S44	5	"9474012"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	OFF	2019/04/08 13:24

			DERWENT; IBM_TDB			
S45	12,155	(delet\$3 modif\$3 withdraw\$3 deduct\$3 chang\$3) same (item product) same (mobile phone portable pda iphone smartphone smart-phone)	USPAT	OR	OFF	2019/04/09 11:15
S46	1,885	(delet\$3 modif\$3 withdraw\$3 deduct\$3 chang\$3) with (item product) near10 (mobile phone portable pda iphone smartphone smart-phone)	USPAT	OR	OFF	2019/04/09 11:18
S47	7	(delet\$3 modif\$3 withdraw\$3 deduct\$3 chang\$3) with (item product) near10 (mobile phone portable pda iphone smartphone smart-phone) same (shopp\$3 adj2 cart)	USPAT	OR	OFF	2019/04/09 11:18
S48	7	(delet\$3 modif\$3 withdraw\$3 deduct\$3 chang\$3) with (item product) near10 (mobile phone portable pda iphone smartphone smart-phone) same (shopp\$3 adj2 cart)	USPAT	OR	OFF	2019/04/09 11:20
S49	7	S48 AND ((G06Q30/06 OR G06Q30/0633 OR G06Q30/0641 OR G06Q10/083 OR G06Q30/0635 OR G06Q10/0836 OR G06Q10/087 OR G06Q20/20 OR G06Q20/343 OR G06Q20/36 OR G06Q30/02 OR G06Q30/0211 OR G06Q30/0214 OR G06Q30/0222 OR G06Q30/0224 OR G06Q30/0242 OR G06Q30/0261 OR G06Q30/0267 OR G06Q30/0601 OR G06Q30/0623 OR G06Q30/0625).CPC.)	USPAT	OR	OFF	2019/04/09 11:21
S50	88	(delet\$3 modif\$3 withdraw\$3 deduct\$3 chang\$3) same (item product) same (mobile phone portable pda iphone smartphone smart-phone) same (shopp\$3 adj2 cart)	USPAT	OR	OFF	2019/04/09 11:22
S51	1	16/012513	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/10/18 12:09

S52	13	customer same (short adj range) same (check\$4 adj out)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/10/18 12:12
S53	5	customer same (short adj range) same (check\$4 adj out) same (counter purchas\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/10/18 12:13
S54	13	shopp\$3 same (short adj range) same (check\$4 adj out) same (counter purchas\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/10/18 12:14
S55	43	("20040030601" "20040170430" "20060009234" "20060133633" "20060145893" "20060159260" "20060172700" "20070167147" "20070178935" "20070184837" "20070197261" "20070250393" "20070265984" "20070285280" "20080040274" "20080140868" "20080146148" "20080167966" "20080200166" "20080227471" "20080306868" "20090023474" "20090113543" "20090153367" "20090169070" "20090213947" "20100067591" "20100265845" "20110314539" "20120214443" "20130156218" "6595929" "6769607" "6957107" "7028897" "7133659" "7155199" "7539241" "7822644" "7912629" "8532069" "8646060" "RE39736").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2019/10/18 12:15
S56	280	shopp\$3 same (short adj range) same ((check\$4 adj out) counter purchas\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/10/18 12:19

S57	52	shopp\$3 same (short adj range) same ((check\$4 adj out) counter purchas\$3) near8 store	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/10/18 12:19
S58	111	(phone iphone mobile PDA cellular) same shopp\$3 same (short adj range) same ((check\$4 adj out) counter purchas\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/10/18 12:21
S59	0	(phone iphone mobile PDA cellular) same (shopp\$3 adj card) same (short adj range) same ((check\$4 adj out) counter purchas\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/10/18 13:04
S60	1	(phone iphone mobile PDA cellular) same (shopp\$3 adj card) same (short adj range)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/10/18 13:04
S61	670	(phone iphone mobile PDA cellular) same (wallet basket cart) same (short adj range)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/10/18 13:07
S62	21	(phone iphone mobile PDA cellular) same (wallet basket cart) same (short adj range) same (purchas\$3 near8 store)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/10/18 13:08
S63	6	(phone iphone mobile PDA cellular) same (short adj range) same (wallet basket cart) same (check\$3 adj2 out)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/10/18 13:10

S64	6	(phone iphone mobile PDA cellular) same (short adj range) same (wallet basket cart (carry\$3 near2 structure)) same (check\$3 adj2 out)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/10/18 13:12
S65	3,456	(wallet basket cart (carry\$3 near2 structure)) near9 (check\$3 adj2 out)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/10/18 13:14
S66	1,760	(wallet basket cart (carry\$3 near2 structure)) near9 (check\$3 adj2 out) same purchas\$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/10/18 13:14
S67	254	(wallet basket cart (carry\$3 near2 structure)) near9 (check\$3 adj2 out) same purchas\$3 same pric\$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/10/18 13:15
S68	762	sens\$3 same carry\$3 same (short-range (short adj range))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/12/12 15:06
S69	4	sens\$3 same carry\$3 same (short-range (short adj range)) same (purchas\$3 buy\$3 pay\$3) near6 (product merchant merchandise item)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2019/12/12 15:08
S70	21	sensor same (carry\$3 basket) same (short-range (short adj range)) same (purchas\$3 buy\$3 pay\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2019/12/12 15:10

S71	184	sens\$3 near9 carry\$3 same (short-range (short adj range))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/12/12 15:16
S72	192	sens\$3 near9 (basket carry\$3) same (short-range (short adj range))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/12/12 15:17
S73	59	2004/0143550	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/12/12 15:18
S74	1	10/324537	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/12/12 15:18
S75	2	sens\$3 near9 (basket carry\$3) same (short-range (short adj range)) same (shopp\$3 buy\$3 purchas\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/12/12 15:21
S76	310	sens\$3 same (short-range (short adj range)) same (shopp\$3 buy\$3 purchas\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/12/12 15:25
S77	4	sens\$3 same (short-range (short adj range)) same (shopp\$3 buy\$3 purchas\$3) near9 ((check\$ adj out) checkout)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/12/12 15:27

S78	71	sens\$3 near15 (short-range (short adj range)) same (shopp\$3 buy\$3 purchas\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/12/12 15:27
S81	117	(sensor sens\$3) near15 (shopp\$3 buy\$3 purchas\$3) near8 (store) near9 (mobile cellular portable pda iphone ipad)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2019/12/12 15:32
S82	2	11/040847	USPAT	OR	OFF	2019/12/12 16:56
S83	18	11/040847	US-PGPUB; USPAT	OR	OFF	2019/12/12 16:56
S85	7,393	H04W48/04.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2019/12/13 16:42
S86	117	(sensor sens\$3) near15 (shopp\$3 buy\$3 purchas\$3) near8 (store) near9 (mobile cellular portable pda iphone ipad)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2019/12/13 16:42
S87	0	S85 and S86	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2019/12/13 16:42
S88	86	S86 AND ((G06Q30/02 OR G06Q30/0201 OR G06Q10/10 OR G06Q20/1235 OR G06Q30/06 OR G06Q30/0269 OR G06Q10/087 OR G06Q50/01 OR G06Q30/0261 OR G06Q30/0265 OR G06Q30/0631 OR G06Q30/0267 OR G06Q30/0241 OR G06Q30/0255 OR G06Q20/208 OR G06Q30/0202 OR G06Q30/0601 OR G06Q30/0633 OR G06Q30/0635 OR G06Q10/08 OR G06Q10/0838 OR	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2019/12/13 16:43

		G06Q20/12 OR G06Q30/0203 OR G06Q30/0204 OR G06Q30/0207 OR G06Q30/0251 OR G06Q30/0281 OR G06Q10/06 OR G06Q10/06393 OR G06Q10/101 OR G06Q20/123 OR G06Q20/18 OR G06Q20/202 OR G06Q20/322 OR G06Q20/3223 OR G06Q20/327 OR G06Q20/38 OR G06Q20/3829 OR G06Q20/42 OR G06Q2220/00 OR G06Q30/016 OR G06Q30/0211 OR G06Q30/0226 OR G06Q30/0239 OR G06Q30/0259 OR G06Q30/0621 OR G06Q30/0625 OR G06Q30/0639 OR G06Q30/0641 OR G06Q30/0643).CPC.)				
S89	39	S86 AND ((G06F16/9535 OR G06F16/273 OR G06F16/3344 OR G06F16/4387 OR G06F16/4393 OR G06F16/637 OR G06F16/639 OR G06F21/10 OR G06F21/6236 OR G06F2213/0038 OR G06F2216/01 OR G06F2221/2113 OR G06F2221/2137 OR G06F3/14 OR G06F16/24 OR G06F16/24575 OR G06F16/90328 OR G06F17/27 OR G06F3/011 OR G06F3/013 OR G06F8/00 OR G06F16/9537 OR G06F17/5054 OR G06F1/3234 OR G06F21/57 OR G06F21/602 OR G06F21/74 OR G06F21/85 OR G06F2217/78 OR G06F3/0482 OR G06F3/0484 OR G06F3/0485).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2019/12/13 16:43
S90	9	S86 AND ((H04M2203/2044 OR H04M2203/554 OR H04M2203/655 OR H04M2207/18 OR H04M3/42374 OR H04M1/0264).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2019/12/13 16:43
S91	25	S86 AND ((H04W4/16 OR H04W4/029 OR H04W4/80 OR H04W4/21 OR H04W4/50 OR H04W4/70 OR H04W4/12 OR H04W4/02 OR H04W4/023 OR H04W4/60 OR H04W64/00 OR H04W48/16 OR H04W4/021 OR H04W4/06 OR H04W4/18 OR H04W64/006 OR H04W8/22).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2019/12/13 16:43
S92	109	(phone cellular cell mobile pda iphone ipad smartphone smart- phone smart-mobile smartmobile)	US-PGPUB; USPAT; USOCR;	OR	ON	2019/12/13 16:44

		near9 (shopping adj2 cart) near9 (detect\$3 track\$3 check\$3) near6 (price item)	FPRS; EPO; JPO; DERWENT; IBM_TDB			
S93	13	S92 AND ((H04W4/029 OR H04W12/06 OR H04W4/023 OR H04W12/00508 OR H04W4/02 OR H04W4/024 OR H04W4/24 OR H04W4/33).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2019/12/13 16:44
S94	34	("20030055707" "20050256786" "20060200378" "20080306756" "20090012704" "20110029997" "20120095805" "20120123674" "20130103539" "20130282533" "20140359510" "20150100383" "20150269549" "20160041000" "6018397" "6601759" "6606411" "6745186" "6810149" "6886101" "6937989" "7006982" "7177820" "7222363" "7431208" "7587756" "7716064" "8069092" "8207851" "8572712" "8814039" "8820633" "8851369" "8930134").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2019/12/13 16:45
S95	4	("20040193413" "20140033134" "20140337930" "20150085111").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2019/12/13 16:45
S96	349	("20010014870" "20010042010" "20020002504" "20020004783" "20020010627" "20020046084" "20020065713" "20020091569" "20020091571" "20020107738" "20020111140" "20020111907" "20020116271" "20020117544" "20020128903" "20020138345" "20020138346" "20020169665" "20020169668" "20020169892" "20020178060" "20020194303" "20030004808" "20030004821" "20030055726" "20030074259" "20030093283" "20030093314" "20030108009" "20030115152" "20030117635" "20030158796" "20030195806" "20030217153" "20030233190" "20040054592" "20040054732" "20040064351" "20040117250" "20040137886" "20040143500" "20040156326" "20040158490" "20040158492"	US-PGPUB; USPAT; USOCR	OR	OFF	2019/12/13 16:45

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S97	290	(phone cellular cell mobile pda iphone ipad smartphone smart- phone smart-mobile smartmobile) near9 (shopping adj2 cart) same sens\$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/03/17 13:30
S98	116	S97 AND ((H04W4/029 OR H04W4/021 OR H04W4/02 OR H04W4/30 OR H04W4/33 OR H04W4/80 OR H04W4/40 OR H04W4/023 OR H04W4/024 OR H04W4/026 OR H04W4/35 OR H04W4/025 OR H04W4/18 OR H04W4/20 OR H04W4/23 OR H04W4/38 OR H04W4/70).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/03/17 13:31
S99	23	("20030215110" "20040111320" "20040128514" "20080104227" "20090262975" "20100114344" "20100134278" "20100199296" "20100280826" "20100322035" "20110019999" "20110028160" "20110029359" "20110029360"	US-PGPUB; USPAT; USOCR	OR	OFF	2020/03/17 13:33

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S100	21	("20030215110" "20040111320" "20040128514" "20080104227" "20090262975" "20100134278" "20100199296" "20100280826" "20100322035" "20110019999" "20110028160" "20110029359" "20110029360" "20110029362" "20110029364" "20110029370" "20110054890" "20110161076" "20120165046" "6356905" "7739705").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2020/03/17 13:34
S101	27	("20030215110" "20040111320" "20040128514" "20080104227" "20080242275" "20090262975" "20100114344" "20100134278" "20100199296" "20100280826" "20100322035" "20110019999" "20110028160" "20110029359" "20110029360" "20110029362" "20110029364" "20110029370" "20110054890" "20110150240" "20110161076" "20120165046" "6356905" "7739705" "8660581" "9064398" "9270807").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2020/03/17 13:34
S102	487	("1774653" "20010042024" "20020060542" "20020095342" "20020154974" "20020156551" "20020165638" "20020165643" "20020165790" "20020174021" "20030028284" "20030152679" "20030170357" "20030185948" "20040068348" "20040081729" "20040093650" "20040098167" "20040117063" "20040146602" "20040216339" "20040217166" "20040221790" "20040249497" "20050008463" "20050047895" "20050072651" "20050080520" "20050104547" "20050149414" "20050177446" "20050216126" "20050230472" "20050238465" "20060147087" "20060163350" "20060178777" "20060206235" "20060220809" "20060221072" "20060235570" "20060241827" "20060244588" "20060279421"	US-PGPUB; USPAT; USOCR	OR	OFF	2020/03/17 13:34

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S108	3	sens\$3 near9 (detect\$3 determin\$4) same (bought buy purchas\$3 plac\$3) same (shopping adj card)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/03/19 17:10
S109	1	sens\$3 near9 (detect\$3 determin\$4) same (bought buy purchas\$3 plac\$3) same (shopping adj card) same store	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/03/19 17:11

S110	3	("20030158796" "20040262386" "20050071234").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2020/03/19 17:11
S111	2	S108 AND ((G06Q10/087).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/03/19 17:11
S112	2	S108 AND ((G07F9/026).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/03/19 17:11
S113	252	(sensor sens\$3) near15 (shopp\$3 buy\$3 purchas\$3) near8 (store) same (mobile cellular portable pda iphone ipad)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/03/19 17:12
S114	36	S113 AND ((H04W4/029 OR H04W4/80 OR H04W4/02 OR H04W4/70 OR H04W4/12 OR H04W4/18 OR H04W4/21 OR H04W4/50 OR H04W12/06 OR H04W4/023 OR H04W4/16 OR H04W64/00 OR H04W12/001 OR H04W48/16 OR H04W4/021 OR H04W4/024 OR H04W4/026 OR H04W4/06 OR H04W4/60 OR H04W8/22).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/03/19 17:13
S115	0	(sens\$3 RFID tagg\$3 (short adj range)) and (phone cellular cell mobile pda iphone ipad) and (identity near6 (shopping adj card)) and ((charg\$3 pric\$3 paid pay bought checkout check-out) and (plac\$3 put) near9 (shopping adj card)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/03/19 17:17
S116	1	(phone cellular cell mobile pda iphone ipad smartphone smart- phone smart-mobile smartmobile) near9 (shopping adj2 cart) same sens\$3 same (short adj range)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/03/19 17:17

S117	1,365,474	(455/\$.ccls. 370/\$.ccls. 379/\$.ccls. 705/\$.ccls. 709/\$.ccls.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/03/19 17:30
S118	49	(phone cellular cell mobile pda iphone ipad smartphone smart- phone smart-mobile smartmobile) near9 (shopping adj2 cart) same sens\$3 same (RFID Wifi Wi-fi (short adj range))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/03/19 17:31
S119	8	S117 and S118	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/03/19 17:32
S120	1	S119 AND ((H04W4/02 OR H04W4/024 OR H04W4/026 OR H04W4/029 OR H04W4/18).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/03/19 17:32
S121	8	S119 AND ((G06Q30/02 OR G06Q20/202 OR G06Q30/0207 OR G06Q30/0214 OR G06Q30/0223 OR G06Q30/0226 OR G06Q30/0234 OR G06Q30/0238 OR G06Q30/0239 OR G06Q30/0251 OR G06Q30/0253 OR G06Q30/0267 OR G06Q30/0268 OR G06Q30/0276 OR G06Q30/0277 OR G06Q30/0601 OR G06Q30/0633 OR G06Q30/0639 OR G06Q90/20).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2020/03/19 17:32
S122	3	("7830259" "7937723" "8172096").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2020/03/19 17:32
S123	6,132	((radio adj frequenc\$3) RF tag tagging bar-code (bar adj code) (image adj recognition) sens\$3 sensor) same ((shopping adj basket) (shopping adj cart))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/11/19 15:47

S124	19	((radio adj frequenc\$3) RF tag tagging bar-code (bar adj code) (image adj recognition)) same ((sens\$3 sensor) near6 purchas\$3) same ((shopping adj basket) (shopping adj cart))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/11/19 15:49
S125	61	("20030220105" "20040030601" "20040143505" "20040143550" "20040170430" "20060009234" "20060085297" "20060133633" "20060145893" "20060159260" "20060165060" "20060172700" "20060194538" "20070129077" "20070167147" "20070178935" "20070184837" "20070197261" "20070243872" "20070250393" "20070260710" "20070265984" "20070285280" "20080040274" "20080140667" "20080140868" "20080146148" "20080167966" "20080200166" "20080227471" "20080306868" "20090023474" "20090113543" "20090153367" "20090169070" "20090213947" "20100067591" "20100265845" "20110314539" "20120214443" "20130156218" "6595929" "6769607" "6944981" "6957107" "7028897" "7133659" "7155199" "7503504" "7539241" "7780081" "7822644" "7912629" "8023580" "8091780" "8249935" "8463238" "8532069" "8646060" "8965281" "RE39736").PN.	US-PGPUB; USPAT	OR	OFF	2020/11/23 10:03
S126	4	16/012513	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2020/11/23 14:04
S127	640	(sensor sens\$2 (radio adj frequency) RF tag\$4 bar-code bar\$code) same ((determin\$4 detect\$3 identif\$4) near9 (remov\$4 add\$4)) same (shop\$4 adj cart)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2021/05/09 21:17

S128	645	(sensor sens\$2 (radio adj frequency) RFID tag\$4 bar-code bar\$code) same ((determin\$4 detect\$3 identif\$4) near9 (remov\$4 add\$4)) same (shop\$4 adj cart)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2021/05/09 21:18
S129	730	(sensor sens\$2 (radio adj frequency) RFID tag\$4 bar-code bar\$code) same (determin\$4 detect\$3 identif\$4) same ((remov\$4 add\$4) near14 (product item merchandis\$4 object)) same (shop\$4 adj cart)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2021/05/09 21:21
S130	450	(sensor sens\$2 (radio adj frequency) RFID tag\$4 bar-code bar\$code) same (determin\$4 detect\$3 identif\$4) near16 ((remov\$4 add\$4) near14 (product item merchandis\$4 object)) same (shop\$4 adj cart)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2021/05/09 21:21
S131	163	S130 AND ((H04W4/029 OR H04W4/02 OR H04W4/80 OR H04W4/023 OR H04W4/025 OR H04W64/006 OR H04W76/10 OR H04W28/0252 OR H04W36/08 OR H04W36/30 OR H04W52/322 OR H04W76/11 OR H04W76/15 OR H04W84/18 OR H04W8/24 OR H04W12/06 OR H04W12/08 OR H04W24/10 OR H04W4/38 OR H04W4/60 OR H04W52/0212 OR H04W52/04 OR H04W64/00 OR H04W64/003 OR H04W88/02 OR H04W8/18 OR H04W4/35 OR H04W28/0231 OR H04W40/02 OR H04W4/021 OR H04W4/33 OR H04W4/70 OR H04W52/223 OR H04W52/40 OR H04W8/183).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2021/05/09 21:23
S132	9	(sensor sens\$2 (radio adj frequency) RFID tag\$4 bar-code bar\$code) same (determin\$4 detect\$3 identif\$4) near16 ((remov\$4 add\$4) near14 (product item merchandis\$4 object)) same (shop\$4 adj cart) same (paid pay\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2021/05/09 21:28
S133	42	S130 AND ((G06F16/955 OR G06F3/0482 OR G06F3/04847 OR G06F3/0488 OR G06F16/535 OR G06F15/76 OR G06F16/2365 OR G06F16/24575 OR G06F16/7837 OR	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	OFF	2021/05/09 21:30

		G06F16/7847 OR G06F16/7854 OR G06F16/786 OR G06F16/93 OR G06F17/18 OR G06F21/31 OR G06F21/316 OR G06F21/36 OR G06F21/54 OR G06F21/552 OR G06F21/554 OR G06F21/604 OR G06F21/62 OR G06F2221/2103 OR G06F2221/2133 OR G06F40/117 OR G06F40/134 OR G06F40/14).CPC.)	DERWENT; IBM_TDB			
S134	90	S130 AND ((G01S5/0289 OR G01S5/14 OR G01S13/82 OR G01S13/878 OR G01S5/0221 OR G01S5/0273 OR G01S5/0284 OR G01S5/04 OR G01S13/886 OR G01S1/68).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2021/05/09 21:30
S135	386	S130 AND ((G06Q10/087 OR G06Q20/208 OR G06Q30/0633 OR G06Q20/12 OR G06Q10/0833 OR G06Q20/20 OR G06Q30/06 OR G06Q20/322 OR G06Q20/326 OR G06Q20/42 OR G06Q20/3276 OR G06Q30/0623 OR G06Q30/0637 OR G06Q10/083 OR G06Q20/327 OR G06Q30/02 OR G06Q10/0836 OR G06Q20/3274 OR G06Q20/3821 OR G06Q20/384 OR G06Q20/385 OR G06Q30/0269 OR G06Q30/0641 OR G06Q30/0643 OR G06Q10/0832 OR G06Q10/0835 OR G06Q20/40145 OR G06Q20/202 OR G06Q20/203 OR G06Q30/0261 OR G06Q30/0635 OR G06Q50/28 OR G06Q20/14 OR G06Q20/201 OR G06Q20/3223 OR G06Q20/325 OR G06Q20/40 OR G06Q30/0251 OR G06Q30/0631 OR G06Q50/01 OR G06Q10/08355 OR G06Q10/0838 OR G06Q20/22 OR G06Q20/308 OR G06Q20/321 OR G06Q20/3221 OR G06Q30/00 OR G06Q30/0267 OR G06Q30/0639 OR G06Q20/085 OR G06Q20/18 OR G06Q20/206 OR G06Q20/209 OR G06Q20/3224 OR G06Q20/3278 OR G06Q20/401 OR G06Q20/4016 OR G06Q30/0601 OR G06Q30/0625 OR G06Q10/06313 OR G06Q10/0637 OR G06Q10/067 OR G06Q10/08 OR G06Q20/047 OR G06Q20/204 OR G06Q20/32 OR G06Q20/387 OR G06Q20/4014 OR G06Q30/016 OR G06Q30/0185 OR G06Q30/0201 OR	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2021/05/09 21:35

		G06Q30/0202 OR G06Q30/0207 OR G06Q30/0224 OR G06Q30/0242 OR G06Q30/0246 OR G06Q30/0282 OR G06Q30/0603 OR G06Q30/0609 OR G06Q30/0613 OR G06Q30/0619 OR G06Q40/123).CPC.)				
S136	386	S130 AND ((G06Q10/087 OR G06Q20/208 OR G06Q30/0633 OR G06Q20/12 OR G06Q10/0833 OR G06Q20/20 OR G06Q30/06 OR G06Q20/322 OR G06Q20/326 OR G06Q20/42 OR G06Q20/3276 OR G06Q30/0623 OR G06Q30/0637 OR G06Q10/083 OR G06Q20/327 OR G06Q30/02 OR G06Q10/0836 OR G06Q20/3274 OR G06Q20/3821 OR G06Q20/384 OR G06Q20/385 OR G06Q30/0269 OR G06Q30/0641 OR G06Q30/0643 OR G06Q10/0832 OR G06Q10/0835 OR G06Q20/40145 OR G06Q20/202 OR G06Q20/203 OR G06Q30/0261 OR G06Q30/0635 OR G06Q50/28 OR G06Q20/14 OR G06Q20/201 OR G06Q20/3223 OR G06Q20/325 OR G06Q20/40 OR G06Q30/0251 OR G06Q30/0631 OR G06Q50/01 OR G06Q10/08355 OR G06Q10/0838 OR G06Q20/22 OR G06Q20/308 OR G06Q20/321 OR G06Q20/3221 OR G06Q30/00 OR G06Q30/0267 OR G06Q30/0639 OR G06Q20/085 OR G06Q20/18 OR G06Q20/206 OR G06Q20/209 OR G06Q20/3224 OR G06Q20/3278 OR G06Q20/401 OR G06Q20/4016 OR G06Q30/0601 OR G06Q30/0625 OR G06Q10/06313 OR G06Q10/0637 OR G06Q10/067 OR G06Q10/08 OR G06Q20/047 OR G06Q20/204 OR G06Q20/32 OR G06Q20/387 OR G06Q20/4014 OR G06Q30/016 OR G06Q30/0185 OR G06Q30/0201 OR G06Q30/0202 OR G06Q30/0207 OR G06Q30/0224 OR G06Q30/0242 OR G06Q30/0246 OR G06Q30/0282 OR G06Q30/0603 OR G06Q30/0609 OR G06Q30/0613 OR G06Q30/0619 OR G06Q40/123 OR H04B1/3822 OR H04B17/3913).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2021/05/09 21:35
S137	0	15/929609 and (physiological adj parameter)	US-PGPUB; USPAT; USOCR;	OR	ON	2021/11/30 15:54

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S138	1	15/929609 and (physiological)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2021/11/30 15:55
S139	75,661	sens\$4 near8 (physiological)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2021/11/30 15:56
S140	22,498	sens\$4 near8 physiological near2 parameter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2021/11/30 15:56
S141	16	transaction same sens\$4 near8 physiological near2 parameter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2021/11/30 15:57
S142	1	S141 AND ((H04W48/04 OR H04W4/02 OR H04W4/023 OR H04W4/029 OR H04W4/80 OR H04W76/10 OR H04W88/06).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2021/11/30 15:57
S143	61	("20030220105" "20040030601" "20040143505" "20040143550" "20040170430" "20060009234" "20060085297" "20060133633" "20060145893" "20060159260" "20060165060" "20060172700" "20060194538" "20070129077" "20070167147" "20070178935" "20070184837" "20070197261" "20070243872" "20070250393" "20070260710" "20070265984"	US-PGPUB; USPAT; USOCR	OR	OFF	2021/11/30 15:58

		"20070285280" "20080040274" "20080140667" "20080140868" "20080146148" "20080167966" "20080200166" "20080227471" "20080306868" "20090023474" "20090113543" "20090153367" "20090169070" "20090213947" "20100067591" "20100265845" "20110314539" "20120214443" "20130156218" "6595929" "6769607" "6944981" "6957107" "7028897" "7133659" "7155199" "7503504" "7539241" "7780081" "7822644" "7912629" "8023580" "8091780" "8249935" "8463238" "8532069" "8646060" "8965281" "RE39736").PN.				
S144	2	S141 AND ((G06F16/219 OR G06F16/254 OR G06F16/285 OR G06F2216/03).CPC.)	US-PGPUB; USPAT; USOCR	OR	OFF	2021/11/30 15:58
S145	4	S141 AND ((Y10S128/903).CPC.)	US-PGPUB; USPAT; USOCR	OR	OFF	2021/11/30 15:59
S146	3	S141 AND ((G06Q20/20 OR G06Q20/202 OR G06Q20/206 OR G06Q20/208 OR G06Q20/321 OR G06Q20/322 OR G06Q20/3278 OR G06Q20/387 OR G06Q20/40145 OR G06Q30/02 OR G06Q30/0201 OR G06Q30/0224 OR G06Q30/0238 OR G06Q30/0255 OR G06Q30/0267 OR G06Q30/0268 OR G06Q30/06 OR G06Q30/0601 OR G06Q50/01).CPC.)	US-PGPUB; USPAT; USOCR	OR	OFF	2021/11/30 15:59
S147	0	S141 AND ((H04Q2209/40 OR H04Q2209/84 OR H04Q9/00).CPC.)	US-PGPUB; USPAT; USOCR	OR	OFF	2021/11/30 15:59
S148	61	("20030220105" "20040030601" "20040143505" "20040143550" "20040170430" "20060009234" "20060085297" "20060133633" "20060145893" "20060159260" "20060165060" "20060172700" "20060194538" "20070129077" "20070167147" "20070178935" "20070184837" "20070197261" "20070243872" "20070250393" "20070260710" "20070265984" "20070285280" "20080040274" "20080140667" "20080140868"	US-PGPUB; USPAT; USOCR	OR	OFF	2021/11/30 16:03

		"20080146148" "20080167966" "20080200166" "20080227471" "20080306868" "20090023474" "20090113543" "20090153367" "20090169070" "20090213947" "20100067591" "20100265845" "20110314539" "20120214443" "20130156218" "6595929" "6769607" "6944981" "6957107" "7028897" "7133659" "7155199" "7503504" "7539241" "7780081" "7822644" "7912629" "8023580" "8091780" "8249935" "8463238" "8532069" "8646060" "8965281" "RE39736").PN.				
S149	4	("6762684" "7378961" "7636041" "8026807").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2021/11/30 16:06
S150	0	((buy\$3 purchas\$4 charg\$3) near8 (product item merchandis\$3)) and (mov\$3 remov\$3 add\$3) and sens\$3 and identif\$6 with transaction same sens\$4 near8 physiological near2 parameter.clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2021/11/30 16:15

11/30/2021 7:16:45 PM

C:\Users\mvu1\Documents\EAST\Workspaces\15929609_Shopping_Cart_Tags.wsp

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)

138517 7590 12/09/2021
Carlson, Caspers, Vandenburg & Lindquist, P.A.
225 S. Sixth St.
Ste. 4200
Minneapolis, MN 55402

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.

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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.
15/929,609	05/12/2020	Peter D. Karabinis	1348.002US6	1207

TITLE OF INVENTION: METHOD AND APPARATUS FOR SENSING PRODUCTS FOR PURCHASE

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	03/09/2022

EXAMINER	ART UNIT	CLASS-SUBCLASS
VU, MICHAEL T	2641	455-456300

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,

(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 Carlson, Caspers, Vandenburg,
& Lindquist, P.A.

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. 502880

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 /Aaron W. Pederson/

Date March 4, 2022

Typed or printed name Aaron W. Pederson

Registration No. 58,607



UNITED STATES
PATENT AND TRADEMARK OFFICE

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Alexandria, VA 22313 - 1450
www.uspto.gov

ELECTRONIC ACKNOWLEDGEMENT RECEIPT

APPLICATION #
15/929,609

RECEIPT DATE / TIME
03/04/2022 03:31:06 PM ET

ATTORNEY DOCKET #
1348.002US6

Title of Invention

METHOD AND APPARATUS FOR SENSING PRODUCTS FOR PURCHASE

Application Information

APPLICATION TYPE Utility - Nonprovisional Application
under 35 USC 111(a)

PATENT # -

CONFIRMATION # 1207

FILED BY Sage Kruse

PATENT CENTER # 60559023

FILING DATE 05/12/2020

CUSTOMER # 138517

FIRST NAMED
INVENTOR Peter D. Karabinis

CORRESPONDENCE
ADDRESS -

AUTHORIZED BY Aaron Pederson

Documents

TOTAL DOCUMENTS: 1

DOCUMENT	PAGES	DESCRIPTION	SIZE (KB)
IssueFeeTransmittal1348002US6.pdf	1	Issue Fee Payment (PTO-85B)	102 KB

Digest

DOCUMENT	MESSAGE DIGEST(SHA-512)
IssueFeeTransmittal1348002US6.pdf	B9D36B529288D9B05E5E833E406B57F23FFF963106371B1B4D EFFF9C7D3C1BDE2991A4EF0937023B4C7BA029FFB333B9964 47E32E4DB854896A87CF422DF436C

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ELECTRONIC PAYMENT RECEIPT

APPLICATION #
15/929,609

RECEIPT DATE / TIME
03/04/2022 03:31:06 PM ET

ATTORNEY DOCKET #
1348.002US6

Title of Invention

METHOD AND APPARATUS FOR SENSING PRODUCTS FOR PURCHASE

Application Information

APPLICATION TYPE Utility - Nonprovisional Application
under 35 USC 111(a)

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CORRESPONDENCE ADDRESS -

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Payment Information

PAYMENT METHOD
DA / 502880

PAYMENT TRANSACTION ID
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PAYMENT AUTHORIZED BY
Sage Kruse

PRE-AUTHORIZED ACCOUNT
502880

PRE-AUTHORIZED CATEGORY
37 CFR 1.16 (National application filing, search, and examination fees); 37 CFR 1.17 (Patent application and reexamination processing fees); 37 CFR 1.19 (Document supply fees); 37 CFR 1.20 (Post Issuance fees); 37 CFR 1.21 (Miscellaneous fees and charges)

FEE CODE	DESCRIPTION	ITEM PRICE(\$)	QUANTITY	ITEM TOTAL(\$)
2501	UTILITY ISSUE FEE	600.00	1	600.00
TOTAL AMOUNT:				\$600.00

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APPLICATION NO.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/929,609	04/12/2022	11304118	1348.002US6	1207

138517 7590 03/23/2022
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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 0 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 Patents Stakeholder Experience (OPSE), Stakeholder Support Division (SSD) at (571)-272-4200.

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IR103 (Rev. 10/09)