AO 120 (Rev. 08/10)

TO:	REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK
Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450	

In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court District of Delaware on the following

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

DOCKET NO.	DATE FILED	U.S. DISTRICT COURT
	4/12/2022	District of Delaware

PLAINTIFF	DEFENDANT
OHVA, Inc.	Bbpos Corp.

	PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1	9,679,286	6/13/2017	OHVA, Inc.
2			OHVA, Inc.
3			OHVA, Inc.
4			OHVA, Inc.
5			OHVA, Inc.

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

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

DECISION/JUDGEMENT
Dismissed - see attached

CLERK	(BY) DEPUTY CLERK	DATE
John A. Cerino	/s/ Mark D. Buckson, Jr.	5/2/2022

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

AO 120 (Rev. 08/10)

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In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court Western District of Texas on the following

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

DOCKET NO.	DATE FILED	U.S. DISTRICT COURT
6:22-cv-366	4/12/2022	Western District of Texas

PLAINTIFF	DEFENDANT
OHVA, Inc.	Fiserv, Inc.

	PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1	9,679,286	6/13/2017	OHVA, Inc.
2			OHVA, Inc.
3			OHVA, Inc.
4			OHVA, Inc.
5			OHVA, Inc.

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

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

DECISION/JUDGEMENT

CLERK	(BY) DEPUTY CLERK	DATE

Copy 1—Upon initiation of action, mail this copy to Director Copy 3—Upon termination of action, mail this copy to Director
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AO 120 (Rev. 08/10)

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Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450	

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

DOCKET NO.	DATE FILED	U.S. DISTRICT COURT
	4/12/2022	District of Delaware

PLAINTIFF	DEFENDANT
OHVA, Inc.	Bbpos Corp.

	PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1	9,679,286	6/13/2017	OHVA, Inc.
2			OHVA, Inc.
3			OHVA, Inc.
4			OHVA, Inc.
5			OHVA, Inc.

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

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

DECISION/JUDGEMENT

CLERK	(BY) DEPUTY CLERK	DATE

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

AO 120 (Rev. 08/10)

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Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450	

In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court Western District of Texas on the following

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

DOCKET NO.	DATE FILED	U.S. DISTRICT COURT
6:20-cv-1191	12/29/2020	Western District of Texas

PLAINTIFF	DEFENDANT
OHVA, Inc.	AnywhereCommerce Inc.

	PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1	9,679,286	06/13/2017	OHVA, Inc.
2			
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In the above—entitled case, the following patent(s)/ trademark(s) have been included:

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

DECISION/JUDGEMENT
1/19/2022 ORDER GRANTING JOINT STIPULATION OF DISMISSAL WITH PREJUDICE (Document 30)

CLERK	(BY) DEPUTY CLERK	DATE
Jeannette J. Clack	J. Rivera	01/19/2022

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

Print Save As... Reset

AO 120 (Rev. 08/10)

TO:	REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK
Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450	

In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court Western District of Texas, Austin Division on the following

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

DOCKET NO.	DATE FILED	U.S. DISTRICT COURT
1:20-CV-065-RP	1/21/2020	Western District of Texas, Austin Division

PLAINTIFF	DEFENDANT
OHVA, Inc.	AffiniPay, LLC

	PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1	9,679,286	3/3/2015	OHVA, Inc.
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In the above—entitled case, the following patent(s)/ trademark(s) have been included:

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

DECISION/JUDGEMENT
Order closing case attached

CLERK	(BY) DEPUTY CLERK	DATE
Jeannette J. Clack		March 2, 2020

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

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
AUSTIN DIVISION

OHVA, INC.,	§	
	§	
Plaintiff,	§	
	§	
v.	§	1:20-CV-65-RP
	§	
AFFINIPAY, LLC,	§	
	§	
Defendant.	§	

ORDER

On February 23, 2020, Plaintiff OHVA, Inc. ("OHVA") dismissed all claims in this case without prejudice by notice of voluntary dismissal under Federal Rule of Civil Procedure 41(a)(1)(A)(i). (Dkt. 14). Rule 41(a)(1)(A)(i) allows a plaintiff to voluntarily dismiss an action without a court order by filing a notice of dismissal before the opposing party serves an answer or a motion for summary judgment. Defendant AffiniPay, LLC has not served an answer or a motion for summary judgment. OHVA's notice is therefore "self-effectuating and terminates the case in and of itself; no order or other action of the district court is required." *In re Amerijet Int'l, Inc.*, 785 F.3d 967, 973 (5th Cir. 2015), *as revised* (May 15, 2015).

As nothing remains to resolve, **IT IS ORDERED** that the case is **CLOSED**.

SIGNED on February 24, 2020.

ROBERT PITMAN
UNITED STATES DISTRICT JUDGE

AO 120 (Rev. 08/10)

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Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450	

In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court District of Delaware on the following

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

DOCKET NO.	DATE FILED	U.S. DISTRICT COURT
	2020-02-11	District of Delaware

PLAINTIFF	DEFENDANT
OHVA, Inc.	AnywhereCommerce Services LLC

	PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1	9,679,286	3/3/2015	OHVA, Inc.
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In the above—entitled case, the following patent(s)/ trademark(s) have been included:

DATE INCLUDED	INCLUDED BY ☐ Amendment ☐ Answer ☐ Cross Bill ☐ Other Pleading	
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DECISION/JUDGEMENT

CLERK	(BY) DEPUTY CLERK	DATE

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

DOCKET NO.	DATE FILED	U.S. DISTRICT COURT
	2020-02-11	District of Delaware

PLAINTIFF	DEFENDANT
OHVA, Inc.	AnywhereCommerce Services LLC

	PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1	9,679,286	3/3/2015	OHVA, Inc.
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In the above—entitled case, the following patent(s)/ trademark(s) have been included:

DATE INCLUDED	INCLUDED BY ☐ Amendment ☐ Answer ☐ Cross Bill ☐ Other Pleading	
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☐ Trademarks or ☑ Patents. (☐ the patent action involves 35 U.S.C. § 292.):

DOCKET NO.	DATE FILED	U.S. DISTRICT COURT
	10/2/2019	District of Delaware

PLAINTIFF	DEFENDANT
OHVA, Inc.	Shift4 Payments, LLC

	PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1	US 9,679,286 B2	3/3/2015	OHVA, Inc.
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In the above—entitled case, the following patent(s)/ trademark(s) have been included:

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

DECISION/JUDGEMENT
Dismissed - see attached

CLERK	(BY) DEPUTY CLERK	DATE
John A. Cerino	/s/ Mark D. Buckson, Jr.	1/17/2020

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

AO 120 (Rev. 08/10)

TO:	REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK
Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450	

In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court Southern District of New York on the following

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

DOCKET NO.	DATE FILED	U.S. DISTRICT COURT
1:19-cv-6114	2019-06-30	Southern District of New York

PLAINTIFF	DEFENDANT
OHVA, Inc.	National Bankcard Inc.

	PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1	9,679,286	3/3/2015	OHVA, Inc.
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In the above—entitled case, the following patent(s)/ trademark(s) have been included:

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

DECISION/JUDGEMENT
Voluntarily Dismissed Pursuant to Rule 41(a)(1)(A)(i) on 10/08/2019

CLERK	(BY) DEPUTY CLERK	DATE
Ruby J. Krajick	/s/ N. Dulal	10/08/2019

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

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AO 120 (Rev. 08/10)

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Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450	

In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court Eastern District of Texas on the following

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

DOCKET NO.	DATE FILED	U.S. DISTRICT COURT
2:19-cv-309	2019-09-14	Eastern District of Texas

PLAINTIFF	DEFENDANT
OHVA, Inc.	Blackbaud, Inc.

	PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1	9,679,286	3/3/2015	OHVA, Inc.
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In the above—entitled case, the following patent(s)/ trademark(s) have been included:

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

DECISION/JUDGEMENT

CLERK	(BY) DEPUTY CLERK	DATE

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In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court District of Delaware on the following

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

DOCKET NO.	DATE FILED	U.S. DISTRICT COURT
	10/2/2019	District of Delaware

PLAINTIFF	DEFENDANT
OHVA, Inc.	Shift4 Payments, LLC

	PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1	US 9,679,286 B2	3/3/2015	OHVA, Inc.
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In the above—entitled case, the following patent(s)/ trademark(s) have been included:

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

DOCKET NO.	DATE FILED	U.S. DISTRICT COURT
	1/15/2019	District of Delaware

PLAINTIFF	DEFENDANT
OHVA, Inc.	PayStand Inc.

	PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1	US 9,679,286 B2	6/13/2017	OHVA, Inc.
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In the above—entitled case, the following patent(s)/ trademark(s) have been included:

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PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
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In the above—entitled case, the following decision has been rendered or judgement issued:

DECISION/JUDGEMENT
Dismissed - see attached

CLERK	(BY) DEPUTY CLERK	DATE
John A. Cerino	/s/ Mark D. Buckson, Jr.	7/29/2019

Copy 1—Upon initiation of action, mail this copy to Director Copy 3—Upon termination of action, mail this copy to Director
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Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450	

In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court Southern District of New York on the following

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

DOCKET NO.	DATE FILED	U.S. DISTRICT COURT
1:19-cv-6114	2019-06-30	Southern District of New York

PLAINTIFF	DEFENDANT
OHVA, Inc.	National Bankcard Inc.

	PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1	9,679,286	3/3/2015	OHVA, Inc.
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In the above—entitled case, the following patent(s)/ trademark(s) have been included:

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

DECISION/JUDGEMENT

CLERK	(BY) DEPUTY CLERK	DATE
Ruby J. Krajick	/s/ D. Howie	7/1/2019

Copy 1—Upon initiation of action, mail this copy to Director Copy 3—Upon termination of action, mail this copy to Director
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In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court District of Delaware on the following

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

DOCKET NO.	DATE FILED	U.S. DISTRICT COURT
	12/10/2018	District of Delaware

PLAINTIFF	DEFENDANT
OHVA, Inc.	Helcim USA Inc.

PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1 US 9,679,286 B2	6/13/2017	OHVA, Inc.
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In the above—entitled case, the following patent(s)/ trademark(s) have been included:

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PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
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In the above—entitled case, the following decision has been rendered or judgement issued:

DECISION/JUDGEMENT
See D.I. 12, Stipulation of Dismissal

CLERK	(BY) DEPUTY CLERK	DATE
John A Cerino, Clerk United States District Court 844 N. King Street, Unit 18 Wilmington, DE 19801	Erie Wall	5/10/19

Copy 1—Upon initiation of action, mail this copy to Director Copy 3—Upon termination of action, mail this copy to Director
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Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450	

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

DOCKET NO.	DATE FILED	U.S. DISTRICT COURT
1:20-CV-065-RP	1/21/2020	Western District of Texas, Austin Division

PLAINTIFF	DEFENDANT
OHVA, Inc.	AffiniPay, LLC

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

DECISION/JUDGEMENT

CLERK	(BY) DEPUTY CLERK	DATE
Jeannette J. Clack		January 21, 2020

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

Doc Code: N572

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
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APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
14/636,674	03/03/2015	Vincent Cedric Colnot	P1987.02

CONFIRMATION NO. 3697

OC000000094761385

24739
CENTRAL COAST PATENT AGENCY, INC
3 HANGAR WAY SUITE D
WATSONVILLE, CA 95076

Cc: BLACKBIRD TECH LLC
ONE BOSTON PLACE, SUITE 2600
BOSTON, MA 02108

Date Mailed: 10/17/2017

DENIAL OF REQUEST FOR POWER OF ATTORNEY

The request for Power of Attorney filed 10/02/2017 is acknowledged. However, the request cannot be granted at this time for the reason stated below.

- ☐ The Power of Attorney you provided did not comply with the new Power of Attorney rules that became effective on June 25, 2004. See 37 CFR 1.32.
- ☐ The revocation is not signed by the applicant, the assignee of the entire interest, or one particular principal attorney having the authority to revoke.
- ☑ The Power of Attorney is from an assignee and the Certificate required by 37 CFR 3.73(c) has not been received.
- ☐ The person signing for the assignee has omitted their empowerment to sign on behalf of the assignee.
- ☐ The inventor(s) is without authority to appoint attorneys since the assignee has intervened as provided by 37 CFR 3.71.
- ☐ The signature(s) of _____ , a co-inventor in this application, has been omitted. The Power of Attorney will be entered upon receipt of confirmation signed by said co-inventor(s).
- ☐ The person(s) appointed in the Power of Attorney is not registered to practice before the U.S. Patent and Trademark Office.
- ☐ Only one Customer Number can be designated for the Power of Attorney in an application. The Customer Number that was captured is the first Customer Number provided on the Power of Attorney document.

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- ☐ A request under 37 CFR 1.48 to add an inventor was granted in this application, however, no power of attorney consistent with the power of attorney granted by the originally named inventive entity has been received. Thus, the addition of the inventor has resulted in the loss of power of attorney in the application. See 37 CFR 1.32(e).

- ☐ The power of attorney has not been accepted because the party who is giving power of attorney has not been identified. Power of attorney may only be signed by the applicant for patent (37 CFR 1.42) or the patent owner. A patent owner who was not the applicant must appoint any power of attorney in compliance with 37 CFR 3.71 and 3.73. See 37 CFR 1.32(b)(4).

- ☐ The power of attorney from the inventors has not been accepted because it is a copy from a prior national application for which benefit is claimed and the continuing application names an inventor who was not named as an inventor in the prior application.

- ☐ The power of attorney from the inventors has not been accepted because the power of attorney must be signed by the applicant for patent. See 37 CFR 1.32(b)(4).

- ☐ Any request to correct or update the name of the applicant must include an application data sheet (ADS) in compliance with 37 CFR 1.76 specifying the correct or updated name of the applicant in the applicant information section. Any request to change the applicant after an original applicant has been specified under 37 CFR 1.46(b) must include a new ADS in compliance with 37 CFR 1.76 specifying the applicant in the applicant information section and comply with 37 CFR 3.71 and 3.73. See 37 CFR 1.46(c).

Any inquiries regarding this notice should be directed to the Application Assistance Unit at 571-272-4200.

Application Assistance Unit
571-272-4200

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
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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
14/636,674	03/03/2015	Vincent Cedric Colnot	P1987.02

CONFIRMATION NO. 3697

24739
CENTRAL COAST PATENT AGENCY, INC
3 HANGAR WAY SUITE D
WATSONVILLE, CA 95076

MISCELLANEOUS NOTICE

OC000000094761385

Date Mailed: 10/17/2017

A communication which cannot be delivered in electronic form has been mailed to the applicant.

OPAP
OCT 0 2 2017
PATENT & TRADEMARK OFFICE

14/636674

PTO/AIA/81A (02-15)
Approved for use through 01/31/2018. OMB 0651-0035
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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PATENT - POWER OF ATTORNEY OR REVOCATION OF POWER OF ATTORNEY WITH A NEW POWER OF ATTORNEY AND CHANGE OF CORRESPONDENCE ADDRESS

Patent Number	9,679,286
Issue Date	6/13/17
First Named Inventor	Vincent Cedric Colnot
Title	Method and apparatus for enabling secure network-based transactions
Attorney Docket No.	9679286

I hereby revoke all previous powers of attorney given in the above-identified patent.

☐ A Power of Attorney is submitted herewith.

OR

☒ I hereby appoint Practitioner(s) associated with the Customer Number identified in the box at right as my/our attorney(s) or agent(s) with respect to the patent identified above, and to transact all business in the United States Patent and Trademark Office connected therewith: 127800

OR

☐ I hereby appoint Practitioner(s) named below as my/our attorney(s) or agent(s) with respect to the patent identified above, and to transact all business in the United States Patent and Trademark Office connected therewith:

Practitioner(s) Name	Registration Number

Please recognize or change the correspondence address for the above-identified patent to:

☐ The address associated with the above-identified Customer Number.

OR

☒ The address associated with the Customer Number identified in the box at right: 127800

OR

☐ Firm or Individual Name					
Address					
City		State		Zip	
Country					
Telephone		Email			

I am the:

☐ Applicant.

OR

☒ Patent owner.

Statement under 37 CFR 3.73(c) (Form PTO/AIA/96) submitted herewith or filed on _____.

SIGNATURE of Applicant or Patent Owner

Signature		Date	9/26/17
Name	Wendy Verlander	Telephone	617-307-7100
Title and Company	CEO, Blackbird Technologies		

NOTE: Signatures of all the applicants or patent owners of the entire interest or their representative(s) are required. If more than one signature is required, submit multiple forms, check the box below, and identify the total number of forms submitted in the blank below.

☒ A total of 2 forms are submitted.

This collection of information is required by 37 CFR 1.31, 1.32, and 1.33. The information is required to obtain or retain a benefit by the public, which is to update (and by the USPTO to process) the file of a patent or reexamination proceeding. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 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.

OPAP
OCT 0 2 2017
PATENT & TRADEMARK OFFICE

PTO/SB/96 (07-09)
Approved for use through 07/31/2012. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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.

STATEMENT UNDER 37 CFR 3.73(b)

Applicant/Patent Owner: Blackbird Tech LLC

Application No./Patent No.: 9,679,286 Filed/Issue Date: 6/13/17

Titled:
Methods and apparatus for enabling secure network based transactions

Blackbird Tech LLC , a Limited Liability Company
(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.

states that it is:

1. [X] the assignee of the entire right, title, and interest in;

2. [ ] an assignee of less than the entire right, title, and interest in
(The extent (by percentage) of its ownership interest is _____ %); or

3. [ ] the assignee of an undivided interest in the entirety of (a complete assignment from one of the joint inventors was made)

the patent application/patent identified above, by virtue of either:

A. [ ] An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy therefore is attached.

OR

B. [X] A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as follows:

1. From: Vincent Cedric Colnot & Ty Fellers To: OHVA, Inc.
The document was recorded in the United States Patent and Trademark Office at
Reel 042412, Frame 0288, or for which a copy thereof is attached.

2. From: OHVA, Inc. To: Blackbird Tech LLC
The document was recorded in the United States Patent and Trademark Office at
Reel 042578, Frame 0433, or for which a copy thereof is attached.

3. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.

[ ] Additional documents in the chain of title are listed on a supplemental sheet(s).

[ ] As required by 37 CFR 3.73(b)(1)(i), the documentary evidence of the chain of title from the original owner to the assignee was, or concurrently is being, submitted for recordation pursuant to 37 CFR 3.11.

[NOTE: A separate copy (*i.e.*, a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, to record the assignment in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

Signature	9/26/17 Date
Wendy Verlander Printed or Typed Name	CEO Title

This collection of information is required by 37 CFR 3.73(b). 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 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.

UNITED STATES PATENT AND TRADEMARK OFFICE

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Address: COMMISSIONER FOR PATENTS
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Alexandria, Virginia 22313-1450
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APPLICATION NO.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/636,674	06/13/2017	9679286	P1987.02	3697

24739 7590 05/24/2017

CENTRAL COAST PATENT AGENCY, INC
3 HANGAR WAY SUITE D
WATSONVILLE, CA 95076

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 98 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

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

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

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

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

Vincent Cedric Colnot, Milpitas, CA;
OHVA, Inc., San Jose, CA;
Ty Fellers, Little Mountain, SC;

The United States represents the largest, most dynamic marketplace in the world and is an unparalleled location for business investment, innovation, and commercialization of new technologies. The USA offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to encourage and facilitate business investment. To learn more about why the USA is the best country in the world to develop technology, manufacture products, and grow your business, visit SelectUSA.gov.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (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)

24739 7590 04/19/2017
CENTRAL COAST PATENT AGENCY, INC
3 HANGAR WAY SUITE D
WATSONVILLE, CA 95076

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 facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

Sheri Beasley	(Depositor's name)
Sheri Beasley	(Signature)
05-09-2017	(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/636,674	03/03/2015	Vincent Cedric Colnot	P1987.02	3697

TITLE OF INVENTION: METHODS AND APPARATUS FOR ENABLING SECURE NETWORK-BASED TRANSACTIONS

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	$480	$0	$0	$480	07/19/2017

EXAMINER	ART UNIT	CLASS-SUBCLASS
SHAIKH, MOHAMMAD Z	3694	705-041000

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 03-02 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 Donald R. Boys
2 Central Coast
3 Patent Agency, Inc.

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

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

(A) NAME OF ASSIGNEE: OHVA, Inc.

(B) RESIDENCE: (CITY and STATE OR COUNTRY): San Jose, CA

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

4a. The following fee(s) are submitted:
- ☑ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies _____

4b. Payment of Fee(s): **(Please first reapply any previously paid issue fee shown above)**
- ☑ A check is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☑ The director is hereby authorized to charge the required fee(s), any deficiency, or credits any overpayment, to Deposit Account Number 500534 (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)
- ☐ Applicant certifying micro entity status. See 37 CFR 1.29 — 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.
- ☐ Applicant asserting small entity status. See 37 CFR 1.27 — NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.
- ☐ Applicant changing to regular undiscounted fee status. — NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

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

Authorized Signature Donald R. Boys Date 05-09-2017
Typed or printed name Donald R. Boys Registration No. 35,074

PTOL-85 Part B (10-13) Approved for use through 10/31/2013 OMB 0651-0033 U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Electronic Patent Application Fee Transmittal

Application Number:	14636674
Filing Date:	03-Mar-2015
Title of Invention:	METHODS AND APPARATUS FOR ENABLING SECURE NETWORK-BASED TRANSACTIONS
First Named Inventor/Applicant Name:	Vincent Cedric Colnot
Filer:	Donald Rex Boys/Sheri Beasley
Attorney Docket Number:	P1987.02

Filed as Small Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
UTILITY APPL ISSUE FEE	2501	1	480	480

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension-of-Time:				
Miscellaneous:				
		Total in USD ($)		**480**

Electronic Acknowledgement Receipt

EFS ID:	29159348
Application Number:	14636674
International Application Number:	
Confirmation Number:	3697
Title of Invention:	METHODS AND APPARATUS FOR ENABLING SECURE NETWORK-BASED TRANSACTIONS
First Named Inventor/Applicant Name:	Vincent Cedric Colnot
Customer Number:	24739
Filer:	Donald Rex Boys/Sheri Beasley
Filer Authorized By:	Donald Rex Boys
Attorney Docket Number:	P1987.02
Receipt Date:	09-MAY-2017
Filing Date:	03-MAR-2015
Time Stamp:	15:32:28
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	DA
Payment was successfully received in RAM	$480
RAM confirmation Number	051017INTEFSW00002273500534
Deposit Account	
Authorized User	
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Issue Fee Payment (PTO-85B)	ISSUE1987_02.pdf	578193 a8439861e8e335696e9cd64ffe4261fae5a51023	no	1
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	30709 0b0cb86ba84389ac007808164856cad881afb7b8	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	608902		

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.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
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www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

24739 7590 04/19/2017

CENTRAL COAST PATENT AGENCY, INC
3 HANGAR WAY SUITE D
WATSONVILLE, CA 95076

EXAMINER
SHAIKH, MOHAMMAD Z

ART UNIT	PAPER NUMBER
3694	

DATE MAILED: 04/19/2017

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/636,674	03/03/2015	Vincent Cedric Colnot	P1987.02	3697

TITLE OF INVENTION: METHODS AND APPARATUS FOR ENABLING SECURE NETWORK-BASED TRANSACTIONS

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	$480	$0	$0	$480	07/19/2017

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: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PTOL-85 (Rev. 02/11)

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (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)

24739 7590 04/19/2017
CENTRAL COAST PATENT AGENCY, INC
3 HANGAR WAY SUITE D
WATSONVILLE, CA 95076

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 facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/636,674	03/03/2015	Vincent Cedric Colnot	P1987.02	3697

TITLE OF INVENTION: METHODS AND APPARATUS FOR ENABLING SECURE NETWORK-BASED TRANSACTIONS

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	$480	$0	$0	$480	07/19/2017

EXAMINER	ART UNIT	CLASS-SUBCLASS
SHAIKH, MOHAMMAD Z	3694	705-041000

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 03-02 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 _____
2 _____
3 _____

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

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

(A) NAME OF ASSIGNEE (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. The following fee(s) are submitted:
- ❑ Issue Fee
- ❑ Publication Fee (No small entity discount permitted)
- ❑ Advance Order - # of Copies _____

4b. Payment of Fee(s): (**Please first reapply any previously paid issue fee shown above**)
- ❑ A check is enclosed.
- ❑ Payment by credit card. Form PTO-2038 is attached.
- ❑ The director is hereby authorized to charge the required fee(s), any deficiency, or credits any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)
- ❑ Applicant certifying micro entity status. See 37 CFR 1.29
  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.
- ❑ Applicant asserting small entity status. See 37 CFR 1.27
  NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.
- ❑ Applicant changing to regular undiscounted fee status.
  NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be 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. _____

PTOL-85 Part B (10-13) Approved for use through 10/31/2013. OMB 0651-0033 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/636,674	03/03/2015	Vincent Cedric Colnot	P1987.02	3697

24739 7590 04/19/2017

CENTRAL COAST PATENT AGENCY, INC
3 HANGAR WAY SUITE D
WATSONVILLE, CA 95076

EXAMINER	
SHAIKH, MOHAMMAD Z	
ART UNIT	PAPER NUMBER
3694	

DATE MAILED: 04/19/2017

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 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, 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. 14/636,674	Applicant(s) COLNOT ET AL.	
	Examiner MOHAMMAD Z. SHAIKH	Art Unit 3694	AIA (First Inventor to File) 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 *3/29/17*.
   ☐ 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, 8-9, 16*. As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   Certified copies:

   a) ☐ All b) ☐ Some *c) ☐ None of the:
   1. ☐ Certified copies of the priority documents have been received.
   2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
   3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

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

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

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
3. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
4. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
5. ☒ Examiner's Amendment/Comment
6. ☒ Examiner's Statement of Reasons for Allowance
7. ☐ Other _____.

/MOHAMMAD Z SHAIKH/
Primary Examiner, Art Unit 3694

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

DETAILED ACTION

1. Claims **1, 8-9, 16** are allowed.

2. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

EXAMINER'S AMENDMENT

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in an interview with Donald Boys (Reg no. 35,074) on 3/31/17.

Listing of Claims:

1. (Currently amended) An apparatus comprising:

a card reader having an input interface configured to accept transaction data from an output interface of a transaction card, and an output pin, as a part of the card reader, configured to directly connect the card reader ~~in~~ to a microphone port of a smart telephone, the card reader providing the transaction data accepted from the output interface of the transaction card to the output pin, and hence to the microphone port, as an analog variable voltage audio signal; and

coded instructions stored in a non-transitory medium of a first Internet-connected server, and accessible by a user of the card reader;

wherein the coded instructions, when executed on a processor in the smart telephone, convert the analog variable voltage audio signal received at ~~on~~ the microphone port to the transaction data as digital data, establish direct data exchange between the smart telephone and a second Internet-connected server and facilitate transactions by a financial institution, or purchases from an online-merchant, using the transaction data.

2-7. (Cancelled)

8. (Previously Presented) The apparatus of claim 1 wherein the coded instructions, when executed on a processor in the smart telephone, retrieve a card verification code (CVV), and use the CVV in purchases or transactions.

9. (Currently amended) A method comprising:

accepting transaction data from a transaction card at an input interface of a card reader having an output pin as a part of the card reader, the output pin directly connecting the card reader in a microphone port of a smart telephone;

receiving the transaction data in the smart telephone as an analog variable voltage audio signal from the microphone port of the smart telephone;

~~converting the transaction data as an analog variable voltage signal in the smart telephone to digital data;~~

converting the analog variable voltage audio signal received at the microphone port to the transaction data as digital data;

establishing direct data exchange with an Internet-connected server providing services to a financial institution or an on-line merchant by executing coded instructions on a processor in the smart telephone; and

facilitating transactions with the financial institution or purchases from the on-line merchant, using the transaction data.

10-15. (Cancelled)

16. (Previously presented) The method of claim 9 wherein the coded instructions, when executed on a processor in the smart telephone, retrieve a card verification code (CVV) from the transaction data received on the microphone port, and ~~to~~ use the CVV in the purchases or transactions.

17. (Cancelled)

REASONS FOR ALLOWANCE

The claimed invention pertains to an apparatus and method which includes a transaction card bearing data and having an output interface capable of transmitting the data, a card reader having an input interface enabled 5 to accept the data from the output interface of the transaction card, conversion circuitry converting the card data to an analog modulated signal, and an output pin from the card reader adapted to engage in a microphone port of a computerized appliance, the output pin providing the analog modulated signal to the port, and thence to the computerized appliance.

Based on prior art search results, the prior art of record neither anticipated nor renders obvious the claim subject matter of the instant invention as a whole, either taken alone in combination, in particular, the prior art of record, does not teach, "*a card reader having an input interface configured to accept transaction data from an output interface of a transaction card, and an output pin, as part of the card reader, configured to directly connect the card reader to a microphone port of a smart telephone*".

The closest prior art of record, **Deepquest** ("Turning your mobile into a magnetic stripe reader", April 13, 2005, pgs. 1-6.), discloses a method for turning a mobile phone into a magnetic stripe reader using a Siemens MC60 smart phone, using an Analog to Digital conversion technique).

The closest prior art of record, **US 2004/0230489 to Goldtwaite et al**, discloses: " An electronic payment and fulfillment system utilized by a customer for purchasing a digital good includes a merchant server, a payment server, an authentication server, a

fulfillment server and a communication device. The merchant server receives a purchase order from the customer and creates a digital order comprising purchase order information. The payment server receives the digital order from the merchant server and further routes the digital order. The authentication server receives the digital order from the payment server, formats the digital order into a first message and further routes the first message. The communication device includes a payment card module and the payment card module receives a payment card and reads payment card identification information stored in the payment card. The communication device also receives the first message from the authentication server, displays the first message to the customer, requests and receives authorization for payment for the purchase order with the payment card from the customer, retrieves the payment card identification information, requests and receives payment card security information from the customer, and routes the authorization and the payment card identification and security information to the authentication server. The authentication server further routes the authorization and payment card identification and security information to the payment server and from the payment server to a financial institution. The financial institution executes the payment and sends a payment confirmation through the payment server to the merchant server and to a fulfillment server. The fulfillment server transmits the digital good via the authentication server to the communication device, and the communication device stores the digital good onto the payment card.

The closest prior art of record, **US Patent 7,490,777 to Walsh** discloses, " An electronic hand-held device and method for inputting and sending requests and for receiving and outputting responses to the requests. The electronic hand-held device is a coupled to a

telecommunications link over which requests are sent and responses are received. The electronic hand-held device can input request data in any number of different information media, including audio tones and voice signals, mechanical input to a keypad, printed bar codes, magnetic data stored in credit cards, and electronic data stored in electronic smart cards. The electronic hand-held device can output responses through an audio speaker, a visual LCD display device, and, optionally, through other output devices including printers. The electronic hand-held device is especially well suited for order entry and acquisition of product information.

The closest prior art of record, **US Patent 7,240,836 to Vrotsos et al,** discloses: " An attachment that may be coupled to a wireless communication device, such as a cellular telephone, personal digital assistant (PDA), or the like, to perform commercial or other information transactions, as well as to an apparatus or system for conducting such transactions. The wireless communication device generally includes an antenna that may be directly accessed by a processor in the attachment for transmission of data to a remote computer over a communication network. The attachment may also include an input device, such as a magnetic stripe reader, smartcard reader, barcode scanner, optical scanner, fingerprint scanner, proximity detector, or the like. When input is received at the input device, the input information may be sent to the attachment processor for processing and transmission to the remote computer via the antenna. The remote computer may process the received attachment-processed data and generate a response to send to the device processor.

For these reasons stated above, the 35 U.S.C 103 rejections for claims **1, 8-9,16** have been withdrawn and the claims have been deemed to be allowable.

CONCLUSION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MOHAMMAD Z. SHAIKH whose telephone number is (571)270-3444. The examiner can normally be reached on M-Thurs, 930-6; Fri, 9-5.

Examiner interviews are available via telephone, in-person, and video conferencing using a USPTO supplied web-based collaboration tool. To schedule an interview, applicant is encouraged to use the USPTO Automated Interview Request (AIR) at http://www.uspto.gov/interviewpractice.

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

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.

/MOHAMMAD Z SHAIKH/
Primary Examiner, Art Unit 3694

3/31/2017
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Notice of References Cited	Application/Control No. 14/636,674	Applicant(s)/Patent Under Reexamination COLNOT ET AL.	
	Examiner MOHAMMAD Z. SHAIKH	Art Unit 3694	Page 1 of 2

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A	US-5,729,591 A	03-1998	Bailey; Ken	G06Q20/32	379/91.01
*	B	US-5,388,148 A	02-1995	Seiderman; Abe	G06Q20/04	379/114.19
*	C	US-4,860,336 A	08-1989	D'Avello; Robert F.	G06Q20/32	379/114.19
*	D	US-7,726,566 B2	06-2010	Brown; Michael K.	G06K7/0008	235/435
*	E	US-7,490,777 B2	02-2009	Walsh; Joseph F.	G06K7/084	235/462.01
*	F	US-2002/0008145 A1	01-2002	Walsh, Joseph F.	G06K7/084	235/462.46
*	G	US-2004/0242267 A1	12-2004	Walsh, Joseph F.	G06K7/084	455/556.1
*	H	US-2004/0230489 A1	11-2004	Goldthwaite, Scott	G06K7/0004	705/26.1
*	I	US-7,240,836 B2	07-2007	Vrotsos; Demetrios G.	G06Q20/341	235/380
*	J	US-6,234,389 B1	05-2001	Valliani; Aziz	G06Q20/20	235/379
*	K	US-6,481,623 B1	11-2002	Grant; Alan H.	G06K7/084	235/380
*	L	US-2004/0058705 A1	03-2004	Morgan, Russell	G06Q20/341	455/556.1
*	M	US-2005/0236480 A1	10-2005	Vrotsos, Demetrios G.	G06Q20/341	235/439

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	"Turning your mobile into a magnetic stripe reader", Deepquest. April 13, 2005, pgs. 1-6.
	V	"Magnetic stripe reader circuit", dated Jan 28, 1997, pgs 1- 7, Luis Padilla Visdomine.
	W	"The simplest magnetic stripe reader", www.gae.ucm.esi~padilla/extrawork/soundtrack.html, Jan 27, 2003, Luis Padilla Visdomine, pages 1-5.
,	X	"Travel Industry targeted for Palm PDA card reader", http:/www.m-travel.com/news/2001/08/travel_industry.html, Aug 22, 2001, pages 1-2.

*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.

Notice of References Cited	Application/Control No. 14/636,674	Applicant(s)/Patent Under Reexamination COLNOT ET AL.	
	Examiner MOHAMMAD Z. SHAIKH	Art Unit 3694	Page 2 of 2

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A	US-7,163,148 B2	01-2007	Durbin; William Gene	G06K7/084	235/449
	B	US-				
	C	US-				
	D	US-				
	E	US-				
	F	US-				
	G	US-				
	H	US-				
	I	US-				
	J	US-				
	K	US-				
	L	US-				
	M	US-				

FOREIGN PATENT DOCUMENTS

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

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	"Magnetic stripe reader/writer" http://www.gae.ucm.es/~padilla/extrawork/stripe.html, Oct 29, 1996, pgs 1-2.
	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.

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	21	("5729591" "6308227" "6497368" "7163148" "20020077974" "20040012875" "20040058705" "20050236480").pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/03/31 08:56
S1	77	card same reader same (audio or sound or mic or microphone) same credit same analog same digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/05 13:53
S2	89	card same reader same (audio or sound or mic or microphone) same credit same analog same digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 13:53
S3	0	card same reader same (audio or sound or mic or microphone) same credit same analog same digital same (cvv or "credit verification value")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 13:53
S4	0	card same reader same (audio or sound or mic or microphone) same credit same analog same digital and (cvv or "credit verification value")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 13:53
S5	581	"I89" and (cvv or "credit verification value" or "security code" or code or pin or alias)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/05 13:54
S6	78	S2 and (cvv or "credit verification value" or "security code" or code or pin or alias)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/05 13:54
S7	1	"sound pass" same credit same card	US-PGPUB;	OR	OFF	2015/05/05

			USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			14:00
S8	5	ohva and microphone	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/05 14:01
S9	34	("2004/0093496").URPN.	USPAT	OR	OFF	2015/05/05 14:03
S10	34	S9 and transaction and card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/05 14:03
S11	6607	(sound near2 card) same (mic or microphone or speaker) same (transaction or smart or debit or card or "stored value" or atm) same card same (reader or scanner or scan or read or reading)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:13
S12	1027	(sound near2 card) same (mic or microphone or speaker) same (transaction or smart or debit or card or "stored value" or atm) same card same (reader or scanner or scan or read or reading) same analog same digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:13
S13	63	(sound near2 card) same (mic or microphone or speaker) same (transaction or smart or debit or card or "stored value" or atm) same card same (reader or scanner or scan or read or reading) same analog same digital same signal	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:13
S14	2	(sound near2 card) same (mic or microphone or speaker) same ((transaction or smart or debit or card or "stored value" or atm) near2 card) same (reader or scanner or scan or read or reading) same analog same digital same signal	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:18
S15	405	(sound near2 card) same (mic or microphone or speaker) same ((transaction or smart or debit or card or "stored value" or atm) near2 card) same (reader or scanner or scan or read or reading) same analog same digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:19
S16	1	(sound near2 card) same (mic or microphone or speaker) same ((transaction or smart or debit or "stored value" or atm) near2 card)	US-PGPUB; USPAT; USOCR; FPRS;	OR	ON	2015/05/05 14:19

		same (reader or scanner or scan or read or reading) same analog same digital	EPO; JPO; DERWENT; IBM_TDB			
S17	2	(sound near2 card) same (mic or microphone or speaker) same ((transaction or smart or debit or "stored value" or atm) near2 card) same (reader or scanner or scan or read or reading) same converter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:19
S18	34	(computer or pda or table or phone or pda or device) same (mic or microphone or speaker) same ((transaction or smart or debit or "stored value" or atm) near2 card) same (reader or scanner or scan or read or reading) same converter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:21
S19	81	(computer or pda or table or phone or pda or device) same (mic or microphone or speaker) same (transaction or smart or debit or "stored value" or atm) same card same (reader or scanner or scan or read or reading) same converter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:23
S20	144	"Mag Tek"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/05 14:27
S21	1	S20 and (mic or microphone or speaker) same (transaction or smart or debit or "stored value" or atm) same card same (reader or scanner or scan or read or reading) same converter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:28
S22	1	S20 and (mic or microphone or speaker) same (transaction or smart or debit or "stored value" or atm) same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:28
S23	1	S20 and (mic or microphone or speaker) same (transaction or smart or debit or "stored value" or atm)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:28
S24	1	S20 and ((mic or microphone or speaker) same (transaction or smart or debit or "stored value" or atm))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:29
S25	678	audio same jack same card same reader	US-PGPUB; USPAT;	OR	OFF	2015/05/05 14:30

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S26	205	audio same jack same card same reader same (financial or debit or transaction or credit or atm)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/05 14:31
S27	3	audio same jack same card same reader same (financial or debit or transaction or credit or atm) same converter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:31
S28	231	audio same jack same card same reader same (financial or debit or transaction or credit or atm)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:31
S29	20	audio same jack same card same reader same (financial or debit or transaction or credit or atm) same pin	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:31
S30	7	S29 AND ((G06Q20/3272 OR G06Q20/3278).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:38
S31	4	"20040093496"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/05 14:38
S32	3	"6708892".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 16:54
S33	1	"6708892".pn. and network	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 16:55

S34	0	"6708892".pn. and sequence	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 16:57
S35	0	"6708892".pn. and chip	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 16:57
S36	95	electronic same chip same digital same memory same amount same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 16:58
S37	28	electronic same chip same digital same memory same amount same card same (credit or debit or atm)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 16:59
S38	2	"6641050".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 17:14
S39	1	"6641050".pn. and bit	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 17:14
S40	179	("6641050").URPN.	USPAT	OR	OFF	2015/05/12 17:16
S41	25	S40 and memory and chip and bit and card and (value or money)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 17:19
S42	20	electronic same chip same digital same memory same amount same card same analog same digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 17:21
S43	0	card near2 chip same credit same bit same analog	US-PGPUB; USPAT; USOCR;	OR	OFF	2015/05/12 17:23

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S44	0	card near7 chip same credit same bit same analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 17:23
S45	2	card same chip same credit same bit same analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 17:23
S46	255	card same chip same credit same bit	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 17:24
S47	76	card same chip same credit same bit same value	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 17:24
S48	28	card same chip same credit same bit same value same (conversion or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 17:24
S49	9	card same integrated same circuit same credit same bit same value same (conversion or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 17:25
S50	16	integrated same circuit same credit same bit same value same (conversion or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 17:30
S51	8	"integrated circuit" same credit same card same digital same converter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 17:34
S52	164	("5920628").URPN.	USPAT	OR	OFF	2015/05/12

						17:39
S53	1	"7761374".pn. and (integrated or chip)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 17:45
S54	4	"5546462".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 17:47
S55	3	"6708892".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 17:49
S56	1	"6708892".pn. and (integrated or circuit or chip)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 17:50
S57	1	"7761374".pn. and (digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 17:50
S58	1	"6708892".pn. and (integrated or circuit or chip)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 17:52
S59	2	"6708892".pn. and smart	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 17:53
S60	4	"6607136".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 08:54
S61	2	"7334735".pn.	US-PGPUB; USPAT; USOCR; FPRS;	OR	OFF	2015/05/13 09:02

			EPO; JPO; DERWENT; IBM_TDB			
S62	1	"7334735".pn. and (card and converter)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 09:03
S63	1	"7334735".pn. and (card and digital and (convert or converting or converter)) and analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 09:06
S64	1	"7334735".pn. and (digital and (convert or converting or converter)) and analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 09:06
S65	1	"6708892".pn. and (digital and (convert or converting or converter)) and analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 09:08
S66	163	(digital near2 analog) same converter same (credit or transaction or atm or debit) same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 09:16
S67	292	(digital near2 analog) same converter same (credit or transaction or atm or debit) same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 09:16
S68	79	(digital near2 analog) same converter same (credit or transaction or atm or debit) same card same (sound or audio or mic or microphone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 09:17
S69	42	(digital near2 analog) same converter same ((credit or transaction or atm or debit) near3 card) same (sound or audio or mic or microphone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 09:20
S71	2	"7620759".pn.	US-PGPUB; USPAT;	OR	ON	2015/05/13 09:37

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S72	2	"6481623".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 09:40
S73	2	"6481623".pn. and (mic or microphone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 09:48
S74	3	"6708892".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 09:50
S75	1	"6708892".pn. and reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 09:51
S76	1	"6708892".pn. and reader and (mic or microphone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 10:32
S77	1	"6607136".pn. and (mic or microphone) and computer and analog and signal and (convert or converting or converter)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 10:39
S78	1	"6607136".pn. and (mic or microphone) and computer and analog and signal and (convert or converting or converter) and reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 10:44
S79	1	"7334735".pn. and (mic or microphone) and computer and analog and signal and (convert or converting or converter) and reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 10:46

S80	15	("6708892").URPN.	USPAT	OR	OFF	2015/05/13 10:58
S81	5	"7118027".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:06
S82	2	"5763862".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:07
S83	2	"6481623".pn. and (mic or microphone) and reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:08
S84	117	("6481623").URPN.	USPAT	OR	OFF	2015/05/13 11:10
S85	2	"7225994".pn. and (mic or microphone) and reader and card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:17
S86	106	("7225994").URPN.	USPAT	OR	OFF	2015/05/13 11:18
S87	1	"20050263590" and (mic or microphone) and reader and card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:21
S88	491360	(computer or device) same (mic or microphone) sam reader same (Smart near2 card) same (convert or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:24
S89	405	(computer or device) same (mic or microphone) same reader same (Smart near2 card) same (convert or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:25
S90	504	(computer or device) same (mic or microphone) same reader same (Smart near2 card) same (convert or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	ON	2015/05/13 11:25

			DERWENT; IBM_TDB			
S91	127	(computer or device) near5 (mic or microphone) same reader same (Smart near2 card) same (convert or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 11:25
S92	122	(computer or device) near5 (mic or microphone) same reader same (credit near2 card) same (convert or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 11:29
S93	3	(computer or device) near5 (mic or microphone) near5 reader same (credit near2 card) same (convert or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 11:29
S94	5	(computer or device) near5 (mic or microphone) near7 reader same (credit near2 card) same (convert or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 11:30
S95	457	(computer or device) near5 (mic or microphone)same (card near2 reader) same (convert or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 11:31
S96	93	(computer or device) near5 (mic or microphone)near5 (card near2 reader) same (convert or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 11:31
S97	106	(computer or device) near5 (mic or microphone)same (card near2 reader) same (convert or converter or digital or analog) same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 11:31
S98	251	"card reader" same audio same (mic or microphone) same computer	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:39
S99	3	"card reader" same audio same (mic or microphone) same computer same converter	US-PGPUB; USPAT; USOCR;	OR	OFF	2015/05/13 11:40

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S100	98	"card reader" same audio same (mic or microphone) same computer same (analog or digital)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:40
S101	54	"reader" same audio same (mic or microphone) same computer same (analog or digital) same (credit or debit or smart)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:44
S102	44	"reader" same sound same (mic or microphone) same computer same (analog or digital) same (credit or debit or smart)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:46
S103	2	"5799036".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:53
S104	0	"5799036".pn. and reader and microphone	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:54
S105	1	"5799036".pn. and card and microphone	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:54
S106	94	("5799036").URPN.	USPAT	OR	OFF	2015/05/13 11:56
S107	1	S63 and "Card reader"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:56
S108	0	S106 and "Card reader"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	OFF	2015/05/13 11:57

			IBM_TDB			
S109	10	S106 and "reader"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:57
S110	1	"card reader" same device same microphone same transaction same ("a/d" or "analog to digital" or "d/a" or "digital to analog")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:58
S111	1	"reader" same device same microphone same transaction same ("a/d" or "analog to digital" or "d/a" or "digital to analog")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:59
S112	10	"card reader" same device same microphone same ("a/d" or "analog to digital" or "d/a" or "digital to analog")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:59
S113	5	"card reader" same (phone or computer or table or pda) same microphone same ("a/d" or "analog to digital" or "d/a" or "digital to analog")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 12:00
S114	6	"7810729".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 12:03
S115	7	"20020030871"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 12:07
S116	2	"20020030871" and converter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 12:07
S117	0	"20020030871" and digital and microphone and reader	US-PGPUB; USPAT; USOCR; FPRS;	OR	OFF	2015/05/13 12:08

			EPO; JPO; DERWENT; IBM_TDB			
S118	4	"7918394".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 12:09
S119	1	"6481623".pn. and network	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 16:21
S120	0	"6481623".pn. and network	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:21
S121	0	"6481623".pn. and internet	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:21
S122	0	"6481623".pn. and lan	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:21
S123	0	"6481623".pn. and wan	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:22
S124	1	"6481623".pn. and line	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:22
S125	1	"6481623".pn. and bit	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:24
S126	1	"6481623".pn. and "0"	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:24
S127	1	"6481623".pn. and "0" and (circuit or chip)	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:26
S128	1	"6481623".pn. and "128"	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:29
S129	1	"6481623".pn. and "40"	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:30
S130	1	"6481623".pn. and S128	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:30
S131	22	((digital to analog) or (a/d)) same converter same credit same data same reader same (microphone or audio or sound)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/14 10:11
S132	22	((digital to analog) or (d/a)) same converter same credit same data same reader same (microphone or audio or sound)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/14 10:13
S133	297	((digital to analog) or (d/a)) same credit same data same reader same (microphone or audio or sound)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	ON	2015/05/14 10:14

			DERWENT; IBM_TDB			
S134	297	((digital to analog) or (d/a)) same credit same data same reader same (microphone or audio or sound) same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/14 10:14
S135	2	(("digital to analog") or ("d/a")) same credit same data same reader same (microphone or audio or sound) same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/14 10:16
S136	2	(("digital to analog") or ("d/a")) same credit same data same reader same (microphone or audio or sound)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/14 10:16
S137	2	(("digital to analog") or ("d/a")) same credit same data same (scanner or reader) same (mic or microphone or audio or sound)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/14 10:17
S138	1	(("digital to analog") or ("d/a")) same transaction same data same (scanner or reader) same (mic or microphone or audio or sound)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/14 10:17
S139	24	(convert or converting or conversion) same (("credit card") near2 (data or information)) same analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/14 10:47
S140	5	"20030076045"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/14 11:11
S141	3	"KR 20030076045"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/14 11:12
S142	0	"blue toot typed portable credit card reader"	US-PGPUB; USPAT; USOCR;	OR	OFF	2015/05/14 11:17

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S143	3	"blue tooth typed portable credit card reader"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/14 11:17
S144	4	"6607136".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/14 11:39
S145	2	"7761374".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/14 11:42
S146	14	"blue tooth" near2 "credit card"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/14 12:09
S147	14	"blue tooth" near2 "credit card"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/14 12:09
S148	0	sound near2 key same microphone same credit same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:02
S149	133	sound same key same microphone same credit same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:02
S150	54	sound same key same microphone same credit same card same reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:02
S151	147	sound same microphone same credit	US-PGPUB;	OR	ON	2015/06/16

		same card same reader	USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			11:03
S152	54	sound same microphone same credit same card same reader same key	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:03
S153	246	microphone same credit same card same reader same audio	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:13
S154	215	microphone same credit near3 card same reader same audio	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:13
S155	1946	microphone same credit near3 card ena3reader same audio	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:14
S156	83	microphone same credit near3 card near3 reader same audio	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:14
S157	3	microphone same credit near3 card near3 reader near4 audio	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:14
S158	190	(headphones or mic or speaker) same credit near3 card near3 reader same audio	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:20
S159	18	(headphones or mic or speaker) same credit near3 card near3 reader near5 audio	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2015/06/16 11:21

			IBM_TDB			
S160	5	(headphones or mic or speaker) same credit near3 card near3 reader same audio same (digital) same analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:21
S161	7	(headphones or mic or speaker) same credit near3 card same reader same audio same (digital) same analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:22
S162	7	(headphones or mic or speaker) same credit same card same reader same audio same (digital) same analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:22
S163	86	(headphones or mic or speaker) same (debit or transaction or gift or prepaid or atm or credit) same card same reader same audio same (digital) same analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:23
S164	78434	(system same "Computer readable medium").clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/06/16 12:21
S165	2584	S164 and 705/35-45.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/06/16 12:22
S166	9498	(system near3 "Computer readable medium").clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/06/16 12:22
S167	1	"US 20150178719"	US-PGPUB; USPAT; USOCR; DERWENT	OR	OFF	2015/07/07 11:19
S168	0	"G06 20/34" AND PAYMENT AND READER	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 11:26

S169	0	"G06 20/34" AND PAYMENT	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 11:26
S170	0	"G06 20/34"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/07/07 11:26
S171	11	"G06Q 20/34" AND READER	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/07/07 11:27
S172	3	"G06Q 20/34" AND MICROPHONE	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/07/07 11:31
S173	26	"G06Q 20/40" AND MICROPHONE	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/07/07 11:32
S174	94	("5799036").URPN.	USPAT	OR	OFF	2015/07/07 12:39
S175	1252	(converter or conversion) same signal same card same data same (mic or microphone or speaker)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/07/07 12:44
S176	55	(converter or conversion) same signal same card same data same (mic or microphone or speaker) same (credit or debit or transaction or debit or gift or "store value card")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/07/07 12:45
S177	68	(digital and analog) same signal same card same data same (mic or microphone or speaker) same (credit or debit or transaction or debit or gift or "store value card")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/07/07 12:49
S178	11	("2004/0026506").URPN.	USPAT	OR	OFF	2015/07/07 12:54

S179	1736	(convert or converting or conversion) same credit same card same data	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 12:57
S180	344	(convert or converting or conversion) same credit same card same data same reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 12:57
S181	70	(convert or converting or conversion) same credit same card same data same reader same (mic or speaker or microphone or "Recording device")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 12:57
S182	143	(convert or converting or conversion) same credit same card same data same reader same (mic or speaker or microphone or "Recording device")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/07/07 12:57
S183	14	"9003508".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 14:33
S184	2	"20050276270"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 17:50
S185	1	"20050276270" and digital and microphone and reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 17:50
S186	10574	digital and microphone and reader and modulation	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 17:53
S187	2377	digital and microphone and reader and modulation and "credit card"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	OFF	2015/07/07 17:54

			DERWENT; IBM_TDB			
S188	1982	digital and microphone and reader and modulation and "credit card" and analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 17:54
S189	869	digital same microphone and reader and modulation and "credit card" and analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 17:54
S190	62	digital same microphone same reader and modulation and "credit card" and analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 17:54
S191	212	digital same microphone same reader and modulation and "card" and analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 17:57
S192	173	digital same microphone same reader and modulation and "card" and analog and (converter or conversion or converting)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 17:57
S193	63	digital same microphone same reader and modulation and "card" and analog and (converter or conversion or converting) and (transaction or credit or debit or atme)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 17:58
S194	66	digital same microphone same reader and modulation and "card" and analog and (converter or conversion or converting) and (transaction or credit or debit or atm)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 17:59
S195	103	digital same microphone same reader and modulation and "card" and analog and (converter or conversion or converting) and (transaction or credit or debit or atm)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/07/07 17:59
S196	42	personal near2 secure near2 information near2 device	US-PGPUB; USPAT; USOCR;	OR	OFF	2015/09/10 10:29

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S197	47	personal near2 secure near2 information near2 device	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 10:30
S198	17	S197 and (mic or microphone or speaker or audio)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 10:34
S199	0	"reader for integrated circuit card used as a e.g. bank card, credit card"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 10:43
S200	0	"reader for integrated circuit card used as a e.g. bank card, credit card"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 10:43
S201	32	reader same "integrated circuit card" same bank same card same (mic or microphone or speaker or audio)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 10:44
S202	0	reader same "integrated circuit card" same bank same card same (mic or microphone or speaker or audio) same (converter or conversion or converting)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 10:44
S203	28	reader same "integrated circuit card" same bank same card same (mic or microphone or speaker or audio) and (converter or conversion or converting)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 10:44
S204	1	acoustic same transducer same earphone same reader same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 10:46
S205	1	acoustic same transducer same	US-PGPUB;	OR	ON	2015/09/10

		earphone same reader same card	USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			10:47
S206	1	acoustic same (converter or conversion or converting) same earphone same reader same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 10:48
S207	332	(audio or sound or acoustic) same (converter or conversion or converting) same (mic or microphone or speaker or earphone) same reader same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 10:48
S208	23	(audio or sound or acoustic) same (converter or conversion or converting) same (mic or microphone or speaker or earphone) same reader same card same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 10:49
S209	5	"20120052910"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 10:56
S210	2	"7896248".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 10:57
S211	0	mobile same magnetice same reader same (audio or microphone or sound or acoustic or mic or speaker or earphone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 11:04
S212	997	mobile same magnetic same reader same (audio or microphone or sound or acoustic or mic or speaker or earphone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 11:04
S213	29	mobile same magnetic same reader same (audio or microphone or sound or acoustic or mic or speaker or earphone) same pin	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2015/09/10 11:04

			IBM_TDB			
S214	162	mobile same card same reader same (audio or microphone or sound or acoustic or mic or speaker or earphone) same pin	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 11:08
S215	103	mobile same card same reader same (audio or microphone or sound or acoustic or mic or speaker or earphone) same pin same (analog or digital)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 11:08
S216	77	mobile same card same reader same (audio or microphone or sound or acoustic or mic or speaker or earphone) same transaction same (analog or digital)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 11:11
S217	370	(phone or device or pda or tablet or laptop or computer) same card same reader same (audio or microphone or sound or acoustic or mic or speaker or earphone) same transaction same (analog or digital)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 11:12
S218	455	(phone or device or pda or tablet or laptop or computer) same card same reader same (audio or microphone or sound or acoustic or mic or speaker or earphone) same (convert or converting or conversion) same (analog or digital)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 11:13
S219	95	(phone or device or pda or tablet or laptop or computer) same card same reader same (audio or microphone or sound or acoustic or mic or speaker or earphone) same (convert or converting or conversion) same (analog or digital) same pin	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 11:13
S220	90	(phone or device or pda or tablet or laptop or computer) same card same reader same (audio or microphone or sound or acoustic or mic or speaker or earphone) same (convert or converting or conversion) same (analog or digital) same (output) same pin	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 11:14
S221	6	output same (plug or pin) same jack same (audio or speaker or mic or microphone or headset or earphone) same analog same digital same reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 11:17
S222	39	output same (plug or pin) same jack same (audio or speaker or mic or microphone or headset or earphone)	US-PGPUB; USPAT; USOCR;	OR	ON	2015/09/10 11:20

		same analog same digital same card	FPRS; EPO; JPO; DERWENT; IBM_TDB			
S223	0	output same (plug or pin) same jack same (audio or speaker or mic or microphone or headset or earphone) same analog same digital same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 11:25
S224	26	output same (plug or pin or jack) same (audio or speaker or mic or microphone or headset or earphone) same analog same digital same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 11:25
S225	7	"20020030871"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 12:46
S226	3	"20050247787"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 12:51
S227	8	"20040093436"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 12:59
S228	2	"6481623".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 13:00
S229	122	("6481623").URPN.	USPAT	OR	OFF	2015/09/10 13:03
S230	8	"20040093436"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 13:11
S231	3	("2004/0093436").URPN.	USPAT	OR	OFF	2015/09/10 13:11
S232	36	(modem or modulation or demodulation) same reader same card same analog same digital same smart	US-PGPUB; USPAT; USOCR;	OR	ON	2015/09/10 13:14

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S233	15	(modem or modulation or demodulation) same reader same card same analog same digital same smart same (plug or jack or port) same (audio or sound or acoustic)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 13:14
S234	8	"20020091633"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 14:54
S235	16	("2002/0091633").URPN.	USPAT	OR	OFF	2015/09/10 14:57
S236	0	"20020091633" and analog	USPAT	OR	OFF	2015/09/10 14:59
S237	0	"20020091633" and analog	USPAT	OR	ON	2015/09/10 15:00
S238	0	"20020091633" and convert	USPAT	OR	ON	2015/09/10 15:00
S239	1	"20020091633" and analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:00
S240	611	card same reader same digital same analog same credit	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:02
S241	33	card same reader same digital same analog same credit same converter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:02
S242	39	card same reader same digital same analog same transaction same converter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:04
S243	10	card same reader same ("a/d" or "d/a") same transaction same converter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2015/09/10 15:05

			IBM_TDB			
S244	1	card same reader same ("digital to analog" or "d/a") same transaction same converter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:07
S245	2	card same reader same ("digital to analog" or "d/a") same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:08
S246	27	card same reader same ("digital to analog" or "d/a") same audio	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:08
S247	3	card same reader same ("digital to analog" or "d/a") same payment	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:10
S248	0	card same reader same ("digital to analog" or "d/a") same financial	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:10
S249	0	card same reader same ("digital to analog" or "d/a") same merchant	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:10
S250	2	transaction same card same reader same ("digital to analog" or "d/a")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:11
S251	96	card same reader same ("digital to analog" or "d/a")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:11
S252	3	"20040093436" and phone	US-PGPUB; USPAT; USOCR; FPRS;	OR	OFF	2015/09/10 15:29

			EPO; JPO; DERWENT; IBM_TDB			
S253	2615	(smart near2 phone) same microphone same (analog or digital or d/a or "digital to analog")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:30
S254	40	(smart near2 phone) same microphone same (analog or digital or d/a or "digital to analog") same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:31
S255	428	(smart near2 phone) same microphone same (analog or digital or d/a or "digital to analog") same (converter or conversion or converting)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:32
S256	22	(smart near2 phone) same microphone near3 (analog or digital or d/a or "digital to analog") same (converter or conversion or converting)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:33
S257	45	(smart near2 phone) same microphone near5 (analog or digital or d/a or "digital to analog") same (converter or conversion or converting)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:33
S258	4944	(phone or pda or tablet) same microphone same (analog or digital or d/a or "digital to analog") same (converter or conversion or converting)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:34
S259	37	(phone or pda or tablet) same microphone same (analog or digital or d/a or "digital to analog") same (converter or conversion or converting) same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:35
S260	442	(phone or pda or tablet) same microphone same (analog or digital or d/a or "digital to analog") same (converter or conversion or converting) same smart	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:37
S261	27	(phone or pda or tablet) same microphone same (analog or digital or	US-PGPUB; USPAT;	OR	ON	2015/09/10 15:37

		d/a or "digital to analog") same (converter or conversion or converting) same smart same reader	USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S262	116	(phone or pda or tablet) same microphone same (analog or digital or d/a or "digital to analog") same (converter or conversion or converting) same reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:38
S263	5920	(phone or pda or tablet) same (mic or speaker or microphone or headphone) same (analog or digital or d/a or "digital to analog") same (converter or conversion or converting)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:42
S264	758	(phone or pda or tablet) same (mic or speaker or microphone or headphone) same (analog or digital or d/a or "digital to analog") same (converter or conversion or converting) same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:42
S266	11	"2002030871"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 16:04
S267	11	"2002030871"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 16:04
S268	7	"20020030871"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 16:05
S269	3	"20050247787"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 16:05
S270	6	"7810729".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 16:06

S271	6	"7810729".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 16:06
S272	62	("20020002507" | "20020030871" | "20040087339" | "20040204074" | "20050247787" | "20070250623" | "20080059370" | "20080059375" | "4845740" | "5764742" | "5850599" | "6129277" | "6481623" | "6579728" | "7252232").PN. OR ("7810729").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2015/09/10 16:06
S273	1365880	pda with microphone with digital or audio	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 16:38
S274	689	pda with microphone with digital same audio	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 16:38
S275	546	pda with microphone with digital with audio	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 16:38
S276	5	pda with microphone with digital with audio same conversion	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 16:39
S277	7	pda with microphone with digital same audio same conversion	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 16:41
S278	10	pda same microphone with digital same audio same conversion	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 16:44
S279	161	pda same microphone same digital same audio same conversion	US-PGPUB; USPAT; USOCR; FPRS;	OR	ON	2015/09/10 16:44

			EPO; JPO; DERWENT; IBM_TDB			
S280	10	pda same microphone same digital same audio same conversion same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 16:44
S281	8	"20040093436"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/11 08:59
S282	3	"20040093436" and reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/11 09:00
S283	377	"colnot"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/11 15:38
S284	55	"colnot" and analog and digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/11 15:38
S285	64	"colnot" and analog and digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/11 15:39
S286	14	"9003508".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/11 15:46
S287	3	"US 7620759"	US-PGPUB; USPAT; USOCR; DERWENT	OR	OFF	2015/09/11 15:49
S288	3	analog same digital same sound same generator same card same reader same (mic or microphone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	ON	2015/09/11 15:56

			DERWENT; IBM_TDB			
S289	3	analog same digital same (Acoustic or sound) same generator same card same reader same (mic or microphone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/11 15:56
S290	90	analog same digital same (Acoustic or sound) same (device or fob or ring or key) same card same reader same (mic or microphone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/11 15:57
S291	3	analog same digital same (Acoustic or sound) same (device or fob or ring or key) same card same reader same (mic or microphone) same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/11 15:57
S292	0	analog same digital same (Acoustic or sound) same (device or fob or ring or key) same card same reader same (mic or microphone) same (jack)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/11 15:57
S293	62	analog same digital same (Acoustic or sound) same (device or fob or ring or key) same card same reader same (mic or microphone) same (jack or output or connector)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/11 15:58
S294	143	(phone or pda or tablet) same (mic or speaker or microphone or headphone) same (analog or digital or d/a or "digital to analog") same (converter or conversion or converting) same card same (jack or plug or connector)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/15 11:57
S295	47	((digital near2 analog) or d/a) same converter same ((credit or transaction or atm or debit) near3 card) same (sound or audio or mic or microphone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/15 11:58
S296	14	S295 AND ((G06K19/07 OR H04M2250/14 OR G06Q20/34 OR G06Q20/123 OR G06Q20/341).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/15 11:59
S297	6	"7810729".pn.	US-PGPUB; USPAT; USOCR;	OR	OFF	2015/10/23 15:34

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S298	5	"20040087339"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/23 15:41
S299	0	"20040087339" and (mic or microphone or speaker)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/23 15:43
S300	19	"8701996".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/23 15:43
S301	17	"1747635"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/23 15:44
S302	2	"20050236480" and (mic or microphone or speaker or audio)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/10/23 15:48
S303	160	("20010001856" | "20020002507" | "20020030871" | "20020077974" | "20020099648" | "20020108062" | "20020169541" | "20020188535" | "20030089772" | "20030132300" | "20030135463" | "20030144040" | "20040012875" | "20040041911" | "20040058705" | "20040087339" | "20040093496" | "20040104268" | "20040127256" | "20040128256" | "20040204074" | "20040230489" | "20040230526" | "20050077870" | "20050209719" | "20050219728" | "20050236480" | "20050242173" | "20050247787" | "20060049256" | "20060094481" | "20060122902" | "20060142058" | "20060208066" | "20060223580" | "20060234771" | "20060273158" | "20070067833" | "20070100651" | "20070124211" | "20070155430" | "20070174080" | "20070221728" | "20070244811" | "20070250623" | "20070255620"	US-PGPUB; USPAT; USOCR	OR	OFF	2015/10/23 15:51

		"20070255653" | "20080027815" | "20080040265" | "20080040274" | "20080059370" | "20080059375" | "20080103972" | "20080147564" | "20080172306" | "20080177662" | "20080208762" | "20080238610" | "20080249939" | "20080275779" | "20090068982" | "20090098908" | "20090100168" | "20090104920" | "20090117883" | "20090119190" | "20090125429" | "20090144161" | "20090159681" | "20090187492" | "20100063893" | "20100108762" | "20100184479" | "20100191653" | "20100222000" | "20100243732" | "20100314446" | "20110084131" | "20110084139" | "20110084147" | "20110137803" | "20110161235" | "20110174879" | "20110180601" | "20110191196" | "20110198395" | "20110202463" | "20110258120" | "20110259957" | "20110313880" | "20120008851" | "20120012653" | "20120016794").PN. OR ("20120052910" | "20120246074" | "4035614" | "4254441" | "4591937" | "4609957" | "4845740" | "5266789" | "5434400" | "5463678" | "5589855" | "5603078" | "5729591" | "5764742" | "5850599" | "5878337" | "5945654" | "5991749" | "6006109" | "6021944" | "6032859" | "6061666" | "6129277" | "6234389" | "6308227" | "6363139" | "6400517" | "6431445" | "6476743" | "6481623" | "6497368" | "6536670" | "6579728" | "6612488" | "6813608" | "6832721" | "6850147" | "6868391" | "6896182" | "6944782" | "7003316" | "7013149" | "7149296" | "7163148" | "7167711" | "7252232" | "7309012" | "7324836" | "7363054" | "7409234" | "7433452" | "7505762" | "7506812" | "7520430" | "7581678" | "7600673" | "7708189" | "7793834" | "7810729" | "7869591" | "7896248" | "7918394" | "7945494" | "8015070" | "8231055" | "8376239" | "8413901" | "WO2010097711" | "WO2010111130" | "WO2010135174").PN.				
S304	68	S303 and (mic or microphone or speaker or audio) and reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/10/23 15:53
S305	2	"7376431".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 10:24

S306	0	"7376431".pn. and (mic or microphone or speaker)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 10:25
S307	0	"7376431".pn. and (mic or microphone or speaker or audi)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 10:25
S308	0	"7376431".pn. and (mic or microphone or speaker or audio)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 10:25
S309	4	"2001084816"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 10:34
S310	4	"2001084816"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/10/26 10:34
S311	1	"data output device and information collecting system comprising data output device"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 10:34
S312	3	"US 9003508"	US-PGPUB; USPAT; USOCR; DERWENT	OR	OFF	2015/10/26 11:27
S313	14	"9003508".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 11:28
S314	2	"US 20150178719"	US-PGPUB; USPAT; USOCR; DERWENT	OR	OFF	2015/10/26 11:46
S315	8	"20040104628"	US-PGPUB; USPAT; USOCR; FPRS;	OR	OFF	2015/10/26 14:04

			EPO; JPO; DERWENT; IBM_TDB			
S316	5	"20040104268"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 14:05
S317	4	"20040093496"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 14:07
S318	0	"20040093496" and phone	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 14:26
S319	3	"20040093436" and phone	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 14:34
S320	1	"20150178719" and phone	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 14:39
S321	1	"20150178719" and phone	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/10/26 14:39
S322	163	"G06Q 20/341"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 15:10
S323	37	"G06Q 20/341" AND PHONE AND CARD AND READER	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 15:10
S324	795	235/380.CCLS. AND "CARD READER" AND (MICROPHONE OR MIC OR	US-PGPUB; USPAT;	OR	OFF	2015/10/26 15:19

		SPEAKER)	USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S325	58	235/380.CCLS. AND "CARD READER" AND (MICROPHONE OR MIC OR SPEAKER) AND (SMART NEAR2 PHONE)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 15:19
S326	1	"20150178719" and modulation	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/10/26 15:32
S327	1	"20150178719" and (modulating or modulation or demodulate or demodulation) and reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/10/26 15:34
S328	1	"20150178719" and (modulating or modulation or demodulate or demodulation and modulated) and reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/10/26 15:34
S329	232	card same reader same (modulating or modulation or demodulate or demodulation and modulated) same mobile	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/10/26 15:45
S330	33	card same reader same (modulating or modulation or demodulate or demodulation and modulated) same mobile same microphone	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/10/26 15:46
S331	25	card same reader same (modulating or modulation or demodulate or demodulation and modulated) same phone same microphone	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/10/26 15:47
S332	1	card same reader same (modulating or modulation or demodulate or demodulation and modulated) same phone same mic	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/10/26 15:48

S333	25	card same reader same (modulating or modulation or demodulate or demodulation and modulated) same phone same speaker	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/10/26 15:48
S334	2	card same reader same (modulating or modulation or demodulate or demodulation and modulated) same pda same speaker	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/10/26 15:50
S335	2	card same reader same (modulating or modulation or demodulate or demodulation and modulated) same pda same speaker	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/10/26 15:50
S336	7	card same reader same (modulating or modulation or demodulate or demodulation and modulated) same square	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/10/26 16:23
S337	10	square.as. and microphone and "card reader" and "Smart phone"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 16:24
S338	2	"62234389".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 16:29
S339	2	"6234389".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 16:30
S340	7	"8011587".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 16:31
S341	502	((smart or wireless or mobile or handheld or portable or cellular or cell) near2 (phone)) with (card near2 reader) same (audio or mic or microphone or headset or sound)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	ON	2016/06/29 11:34

		same card	DERWENT; IBM_TDB			
S342	319	((smart or wireless or mobile or handheld or portable or cellular or cell) near2 (phone)) with (card near2 reader) with (audio or mic or microphone or headset or sound) same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/29 11:35
S343	319	((smart or wireless or mobile or handheld or portable or cellular or cell) near2 (phone)) with (card near2 reader) with (audio or mic or microphone or headset or sound) with card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/29 11:35
S344	70	((smart or wireless or mobile or handheld or portable or cellular or cell) near2 (phone)) near3 (card near2 reader) with (audio or mic or microphone or headset or sound) with card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/29 11:35
S345	41	S343 AND ((G06Q20/20 OR G06Q20/32 OR G06Q20/325 OR G06Q20/34 OR G07F7/0873 OR G07F7/0886).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/29 11:56
S346	6	"7810729".PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 11:59
S347	7	"20020030871"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:04
S348	0	"20020030871" AND READER	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:05
S349	3	"20050247787"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:07
S350	0	"20050247787" AND (AUDIO OR MICROPHONE OR SOUND OR HEADSET OR EARPHONE)	US-PGPUB; USPAT; USOCR;	OR	OFF	2016/06/29 12:08

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S351	0	"20050247787" AND (AUDIO OR MICROPHONE OR SOUND OR HEADSET OR EARPHONE)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/29 12:08
S352	83	(AUDIO NEAR2 JACK) SAME PHONE SAME CARD SAME READER	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:10
S353	144	((AUDIO OR MICROPHONE OR EARPHONE OR HEADSET) NEAR2 JACK) SAME PHONE SAME CARD SAME READER	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/29 12:12
S354	247	((AUDIO OR MICROPHONE OR EARPHONE OR HEADSET) NEAR2 (CONNECTOR OR JACK)) SAME PHONE SAME CARD SAME READER	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/29 12:12
S355	0	"73776431".PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:17
S356	2	"7376431".PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:17
S357	3	"8615445".PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:19
S358	1	"8615445".PN. AND "MICROPHONE PORT"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:20
S359	1	"8615445".PN. AND "MICROPHONE	US-PGPUB;	OR	ON	2016/06/29

		PORT"	USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			12:20
S360	0	"20010848816"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:25
S361	4	"2001084816"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:25
S362	0	"2001084816" AND MICROPHONE AND READER	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:26
S363	0	"20010035459" AND MICROPHONE AND READER	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:27
S364	6	"20010035459"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:27
S365	4	"6006109".PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:35
S366	0	"6006109".PN. AND READER	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:35
S367	0	"6006109".PN. AND CARD	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	OFF	2016/06/29 12:36

			IBM_TDB			
S368	0	"6006109".PN. AND CARD	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/29 12:36
S369	81	("6006109").URPN.	USPAT	OR	OFF	2016/06/29 12:36
S370	49	S369 AND READER	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:36
S371	4	"5388148".PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:39
S372	64	("5388148").URPN.	USPAT	OR	OFF	2016/06/29 12:39
S373	20	S372 AND READER	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:40
S374	14	S372 AND READER AND (SOUND OR AUDIO OR MICROPHONE OR EARPHONE OR MIC OR HEADPHONE)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/29 12:42
S375	1	"6607136".PN. AND PHONE	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 12:35
S376	172	(SMART NEAR2 PHONE) SAME SERVER SAME INTERNET SAME TRANSACTION SAME (BANK OR "FINANCIAL INSTITUTION" OR MERCHANT OR RETAILER)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/30 12:37
S377	3	"7096003".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	OFF	2016/06/30 14:52

			IBM_TDB			
S378	2	"20040230489"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 15:23
S379	52	microphone same port same mobile same server same reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/30 15:35
S380	1443	phone same (card near2 reader) same server	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 15:40
S381	557	(mobile near2 phone) same (card near2 reader) same server	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/30 15:41
S382	47	(mobile near2 phone) same (card near2 reader) same server same microphone	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/30 15:41
S383	252	(mobile near2 phone) with (card near2 reader) same server	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/30 15:42
S384	168	(mobile near2 phone) with (card near2 reader) with server	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/30 15:42
S385	17	(cvv or "card verification value") same digital same (Data or string or code) same transaction same purchase	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 15:52
S386	43	"7761374" and digital	US-PGPUB; USPAT; USOCR; FPRS;	OR	OFF	2016/06/30 15:54

			EPO; JPO; DERWENT; IBM_TDB			
S387	1	"7761374".pn. and digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 15:54
S388	1	"7761374".pn. and (hash or cryptogram or digital)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 15:57
S389	23	(cvv or "card verification value") near2 (hash or cryptogram or digital)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 15:59
S390	266	(cvv or "card verification value") same (hash or cryptogram or digital)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:00
S391	141	(cvv or "card verification value") same (hash or cryptogram or digital) same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:00
S392	1311	(cvv or "card verification value") same (zero or one or logic or digital)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/30 16:05
S393	648	(cvv or "card verification value") same (zero or one or logic or digital) same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/30 16:05
S394	641	(cvv or "card verification value") same (zero or one or digital) same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/30 16:05
S395	100	(cvv or "card verification value") same (zero or digital) same transaction	US-PGPUB; USPAT;	OR	ON	2016/06/30 16:06

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S396	5	(cvv or "card verification value") near2 (digital) same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/30 16:07
S397	44	(cvv or "card verification value") with (digital) same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/30 16:08
S398	60	(cvv or "card verification value") with (digital)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/30 16:09
S399	10	(cvv or "card verification value") near3 (digital)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/30 16:09
S400	40	(cvv or "card verification value") near5 (digital)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/30 16:10
S401	42	(cvv or "card verification value") near5 (digital or zero)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/30 16:10
S402	246	(cvv or "card verification value") near5 (digital or zero or one)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/30 16:10
S403	179	colnot.in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:12

S404	4	S403 and cvv	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:12
S405	110	(card near2 reader) same ("card verification value" or cvv) same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:13
S406	11	(card near2 reader) same ("card verification value" or cvv) same transaction same (encrypt or encrypting or encryption)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:14
S407	16	("card verification value" or cvv) same transaction same (hash)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:20
S408	2	("card verification value" or cvv) same digital same (hash)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:21
S409	97362	("card verification value" or cvv or (card near2 identifier or idenfication or identifying)) same digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:27
S410	2890	("card verification value" or cvv or (card near2 identifier or idenfication or identifying)) same digital same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:27
S411	700511	("card verification value" or cvv or (card near2 identifier or idenfication or identifying)) same digital same transaction (purchase or financial)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:27
S412	983	("card verification value" or cvv or (card near2 identifier or idenfication or identifying)) same digital same transaction same (purchase or financial)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	OFF	2016/06/30 16:27

			DERWENT; IBM_TDB			
S413	71	(card near2 (identifier or idenfication or identifying)) same digital same transaction same (purchase or financial)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:29
S414	4	"09/754665"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:34
S415	9	"09/754465"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:35
S416	2	"20010037312" and digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:36
S417	35	digital near2 credit near2 card near2 data	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:40
S418	2	"20090292642"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:51
S419	11	"20040039919"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:57
S420	0	"20040039919" and S384	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:58
S421	2	"20040039919" and "802"	US-PGPUB; USPAT; USOCR;	OR	OFF	2016/06/30 16:58

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S422	2	"20040039919" and "802" and digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:59
S423	2	"20040039919" and signature	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 17:03
S424	2	"20040039919" and signature	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/30 17:03
S425	2	"20040039919" and signature and transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/30 17:06
S426	2	"20040039919" and "digital signature"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/30 17:10
S427	2	"20040039919" and ("card number")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/07/02 11:24
S428	41	(virtual same credit same credit) same (cvv or "credit verification value")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/07/02 11:29
S429	42	(virtual same credit same card) same (cvv or "credit verification value")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/07/02 11:29
S430	2	"20040039919" and digital	US-PGPUB;	OR	OFF	2016/07/02

			USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			11:50
S431	11	"20040039919"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/07/02 11:54
S432	2	"20040230489"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/07/09 16:56
S433	267	"G06Q 20/341"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/09/01 08:47
S434	90	"G06Q 20/341" AND "CARD READER"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/09/01 08:48
S435	12	"G06Q 20/341" AND "CARD READER" AND MICROPHONE	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/09/01 08:48
S436	2	"20150178719"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/10/04 16:06
S437	2856921	20150178719and engage	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/10/05 13:16
S438	2	"20150178719" and engage	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	OFF	2016/10/05 13:17

			IBM_TDB			
S439	2	"20150178719" and engag$6	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/10/05 13:17
S440	2	"8983873".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/10/05 13:46
S441	2	"9137388".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/10/05 13:48
S442	1	"20150178719" and software	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/10/05 13:50
S443	1	"20150178719" and medium	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/10/05 13:50
S444	0	(A/D or "analog to digital") same (smart near2 (phone or device)) same (convert or converting or conversion) same voltage same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/10 15:58
S445	0	(A/D or "analog to digital") same (smart near2 (phone or device)) same (convert or converting or conversion) same voltage and transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/10 15:59
S446	77	(A/D or "analog to digital") same (smart near2 (phone or device)) same (convert or converting or conversion)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/10 15:59
S447	35	(A/D or "analog to digital") same ((mobile near2 (phone or device)) or (tablet or computer or pda)) same (convert or converting or conversion)	US-PGPUB; USPAT; USOCR; FPRS;	OR	ON	2017/01/10 16:06

		same transaction	EPO; JPO; DERWENT; IBM_TDB			
S448	5	"20040058705"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/01/10 16:10
S449	84	(analog or digital) same ((mobile near2 (phone or device)) or (tablet or computer or pda)) same (convert or converting or conversion) same transaction same (mic or microphone or speaker)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/10 16:19
S450	49	(analog or digital) same ((mobile near2 (phone or device)) or (tablet or computer or pda)) same (convert or converting or conversion) same transaction same (mic or microphone or speaker) and reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/10 16:20
S451	9	(analog or digital) same ((mobile near2 (phone or device)) or (tablet or computer or pda)) same (convert or converting or conversion) same transaction same (mic or microphone or speaker) same reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/10 16:27
S452	521	((AUDIO OR MICROPHONE OR EARPHONE OR HEADSET) same (CONNECTOR OR JACK)) SAME PHONE SAME CARD SAME READER	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/10 16:29
S453	108	((AUDIO OR MICROPHONE OR EARPHONE OR HEADSET) same (CONNECTOR OR JACK)) SAME PHONE SAME CARD SAME READER same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/10 16:30
S454	28	((AUDIO OR MICROPHONE OR EARPHONE OR HEADSET) same (CONNECTOR OR JACK)) SAME PHONE SAME CARD SAME READER same transaction same (ADC or convert or conversion or "Analog to digital" or "A/D")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/10 16:30
S455	25	((AUDIO OR MICROPHONE OR EARPHONE OR HEADSET) same (CONNECTOR OR JACK)) SAME (mobile or wireless or portable) SAME CARD SAME READER same transaction same (ADC or convert or conversion or "Analog to digital" or "A/D")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/10 16:38
S456	4	"9016572".pn.	US-PGPUB; USPAT;	OR	OFF	2017/01/11 09:23

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S457	2	"14636674"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/01/11 09:27
S458	14	"9003508".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/01/11 13:22
S459	0	WO2001061973	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/01/11 14:49
S460	0	"Accessory board with smart card reader for a portable radio telephone"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/01/11 14:50
S461	4	"11/533030"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/01/11 16:06
S462	1	"20070067833" and "reader"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/01/11 16:08
S463	2	"14636674"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/01/11 17:48
S464	4	"9016572".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/01/12 11:12

S465	1	"9016572".pn. and analog and digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/01/12 11:25
S466	1	"9016572".pn. and analog and digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/12 11:25
S467	1	"9016572".pn. and analog and merchant and mobile	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/12 11:29
S468	2	"9016572".pn. and method	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/12 11:44
S469	1	"9016572".pn. and analog and waveform and mobile	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/12 11:53
S470	1	"9016572".pn. and (convert or converting or digitize or digitizing)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/12 12:01
S471	1	"9016572".pn. and (convert or converting or digitize or digitizing or conversion)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/12 12:01
S472	1	"9016572".pn. and CVV	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/12 12:04
S473	705	"9016572".pn. and CVV or "card verification code"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	ON	2017/01/12 12:04

			DERWENT; IBM_TDB			
S474	1	"9016572".pn. and CVV and "card verification code"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/12 12:05
S475	16	CVV and "card verification code" and square	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/12 12:07
S476	3	"9183480".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/01/12 12:11
S477	1	"9183480".pn. and mobile and digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/01/12 12:11
S478	0	"9183480".pn. and mobile and digital and analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/01/12 12:11
S479	1	"9183480".pn. and mobile and digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/01/12 12:12
S480	0	"9183480".pn. and mobile and (convert or converting or conversion)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/01/12 12:12
S481	0	(CVV or "card verification code") same (card near2 reader) same mobile same digital same microphone	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/12 12:15
S482	0	(CVV or "card verification code") same (reader) same mobile same digital same microphone	US-PGPUB; USPAT; USOCR;	OR	ON	2017/01/12 12:15

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S483	0	(CVV or "card verification code") same (reader) same mobile same digital same mic	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/12 12:16
S484	0	(CVV or "card verification code") same (reader) same phone same digital same microphone	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/12 12:16
S485	32	((AUDIO OR MICROPHONE OR EARPHONE OR HEADSET) same (CONNECTOR OR JACK)) SAME (phone or wireless or portable or pda or tablet or "cellular phone" or "smart phone") SAME CARD SAME READER same transaction same (ADC or convert or conversion or "Analog to digital" or "A/D" or digitize or digitizing)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/12 13:30
S486	5	"20040058705"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/01/13 09:40
S487	156	("2004/0058705").URPN.	USPAT	OR	OFF	2017/01/13 09:40
S488	156	("2004/0058705").URPN.	USPAT	OR	OFF	2017/01/13 11:23
S489	56	S488 and square	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/01/13 11:23
S490	200	((ANALOG) SAME (DIGITAL) SAME (CONVERTER OR CONVERSION) OR (A NEAR2 D NEAR2 CONVERTER)) SAME (PHONE OR TELEPHONE OR PDA OR TABLET) SAME (TERMINAL OR READER) SAME (ONLINE OR INTERNET OR WIRELESS) SAME (MICROPHONE OR MIC OR SPEAKER OR JACK)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/03/30 18:51
S491	56	((ANALOG) SAME (DIGITAL) SAME (CONVERTER OR CONVERSION) OR (A NEAR2 D NEAR2 CONVERTER)) SAME (PHONE OR TELEPHONE OR PDA OR TABLET) SAME (TERMINAL OR READER) SAME (ONLINE OR	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2017/03/30 18:53

		INTERNET OR WIRELESS) SAME (MICROPHONE OR MIC OR SPEAKER OR JACK) SAME CARD	IBM_TDB			
S492	657	((ANALOG) SAME (DIGITAL) SAME (CONVERTER OR CONVERSION) OR (A NEAR2 D NEAR2 CONVERTER) OR (MODULATION OR DEMODULATION OR MODEM)) SAME (PHONE OR TELEPHONE OR PDA OR TABLET) SAME (TERMINAL OR READER) SAME (ONLINE OR INTERNET OR WIRELESS) SAME (MICROPHONE OR MIC OR SPEAKER OR JACK) SAME CARD	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/03/30 18:57
S493	54	((ANALOG) SAME (DIGITAL) SAME (CONVERTER OR CONVERSION) OR (A NEAR2 D NEAR2 CONVERTER) OR (MODULATION OR DEMODULATION OR MODEM)) SAME (PHONE OR TELEPHONE OR PDA OR TABLET) SAME (TERMINAL OR READER) SAME (ONLINE OR INTERNET OR WIRELESS) SAME (MICROPHONE OR MIC OR SPEAKER OR JACK) SAME CARD SAME TRANSACTION	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/03/30 18:58
S494	151	("5371348").URPN.	USPAT	OR	OFF	2017/03/30 19:02
S495	42	S494 AND ("CARD READER")\	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/03/30 19:03
S496	42	S494 AND ("CARD READER")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/03/30 19:03
S497	109	((ANALOG) SAME (DIGITAL) SAME (CONVERTER OR CONVERSION) OR (A NEAR2 D NEAR2 CONVERTER) OR (MODULATION OR DEMODULATION OR MODEM)) SAME (PHONE OR TELEPHONE OR PDA OR TABLET) SAME (CARD NEAR2 READER) SAME (ONLINE OR INTERNET OR WIRELESS) SAME (MICROPHONE OR MIC OR SPEAKER OR JACK)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/03/30 19:05
S498	48	((ANALOG) SAME (DIGITAL) SAME (CONVERTER OR CONVERSION) OR (A NEAR2 D NEAR2 CONVERTER) OR (MODULATION OR DEMODULATION OR MODEM)) SAME (TABLET OR "CELL PHONE" OR "CELLULAR PHONE" OR "SMART PHONE") SAME (CARD NEAR2 READER) SAME (ONLINE OR INTERNET OR WIRELESS) SAME (MICROPHONE OR MIC OR SPEAKER OR JACK)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/03/30 19:12

S499	22	(TABLET OR "CELL PHONE" OR "CELLULAR PHONE" OR "SMART PHONE") SAME (CARD NEAR2 READER) SAME (ONLINE OR INTERNET OR WIRELESS) SAME (MICROPHONE OR MIC OR SPEAKER OR JACK) SAME TRANSACTION	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/03/30 19:13
S500	22	card same reader same (audio or sound or mic or microphone or speaker) same transaction same analog same digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/03/30 19:15
S501	142	card same reader same (audio or sound or mic or microphone or speaker) same transaction same ((ANALOG) SAME (DIGITAL) SAME (CONVERTER OR CONVERSION) OR (A NEAR2 D NEAR2 CONVERTER) OR (MODULATION OR DEMODULATION OR MODEM))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/03/30 19:15
S502	44	S501 AND ((G06Q20/20 OR G06Q30/0601 OR H04M2250/14).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/03/30 19:26
S503	3	"20040242267"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/03/30 19:29
S504	6	("2004/0242267").URPN.	USPAT	OR	OFF	2017/03/30 19:30
S505	2	"7490777".PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/03/30 19:31
S506	3	("20020008145" | "20040242267" | "7093759").PN. OR ("7490777").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2017/03/30 19:31
S507	103	("2004/0230489").URPN.	USPAT	OR	OFF	2017/03/30 19:32
S508	57	S507 AND "CARD READER"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/03/30 19:33
S510	10	"20040039919"	US-PGPUB; USPAT; USOCR;	OR	OFF	2017/03/30 21:31

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S511	4	"5754655".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/03/30 21:31
S512	4	"5388148".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/03/30 21:31
S513	2	"5388148".pn. and reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/03/30 21:32
S514	4	"4860336".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/03/30 21:33
S515	93	("4860336").URPN.	USPAT	OR	OFF	2017/03/30 21:34
S516	25	("4860336").URPN. and "card reader"	USPAT	OR	OFF	2017/03/30 21:34

EAST Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S509	20	card same reader same (audio or sound or mic or microphone or speaker) same transaction same analog same digital	US-PGPUB; USPAT	OR	ON	2017/03/30 19:29

3/31/2017 9:02:40 AM
C:\Users\mshaikh\Documents\EAST\Workspaces\14636674.wsp

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BIB DATA SHEET

CONFIRMATION NO. 3697

SERIAL NUMBER	FILING or 371(c) DATE RULE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
14/636,674	03/03/2015	705	3694	P1987.02

APPLICANTS
OHVA, Inc., San Jose, CA;

INVENTORS
Vincent Cedric Colnot, Milpitas, CA;
Ty Fellers, Little Mountain, SC;

**** CONTINUING DATA ***************************
This application is a CON of 14/524,842 10/27/2014 PAT 9003508
which is a CON of 11/533,030 09/19/2006 ABN
which claims benefit of 60/719,273 09/20/2005

**** FOREIGN APPLICATIONS ***************************

**** IF REQUIRED, FOREIGN FILING LICENSE GRANTED **** ** SMALL ENTITY **
03/12/2015

Foreign Priority claimed ☐ Yes ☑ No 35 USC 119(a-d) conditions met ☐ Yes ☑ No Verified and Acknowledged /MOHAMMAD Z SHAIKH/ Examiner's Signature	☐ Met after Allowance Initials	STATE OR COUNTRY	SHEETS DRAWINGS	TOTAL CLAIMS	INDEPENDENT CLAIMS
		CA	15	16	2

ADDRESS
CENTRAL COAST PATENT AGENCY, INC
3 HANGAR WAY SUITE D
WATSONVILLE, CA 95076
UNITED STATES

TITLE
Methods and Apparatus for Enabling Secure Network-Based Transactions

FILING FEE RECEIVED		
730	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

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14636674	COLNOT ET AL.
	Examiner	**Art Unit**
	MOHAMMAD Z SHAIKH	3694

CPC						
Symbol					**Type**	**Version**
G06Q		20	/	341	F	2013-01-01
H04L		9	/	3271	I	2013-01-01
H04L		63	/	0853	I	2013-01-01
H04L		9	/	0844	I	2013-01-01
H04L		9	/	3213	I	2013-01-01
H04L		63	/	083	I	2013-01-01
H04L		63	/	10	I	2013-01-01
G06Q		20	/	4018	I	2013-01-01
H04L		2209	/	56	A	2013-01-01
H04L		2209	/	80	A	2013-01-01
			/			
			/			
			/			
			/			

CPC Combination Sets							
Symbol				**Type**	**Set**	**Ranking**	**Version**
			/				
			/				

NONE		**Total Claims Allowed:**	
(Assistant Examiner)	(Date)	4	
/MOHAMMAD Z SHAIKH/ Primary Examiner.Art Unit 3694	03/31/2017	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	6

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14636674	COLNOT ET AL.
	Examiner	**Art Unit**
	MOHAMMAD Z SHAIKH	3694

US ORIGINAL CLASSIFICATION		INTERNATIONAL CLASSIFICATION	
CLASS	SUBCLASS	CLAIMED	NON-CLAIMED
235	449		

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

NONE		**Total Claims Allowed:**	
(Assistant Examiner)	(Date)	4	
/MOHAMMAD Z SHAIKH/ Primary Examiner.Art Unit 3694	03/31/2017	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	6

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14636674	COLNOT ET AL.
	Examiner	**Art Unit**
	MOHAMMAD Z SHAIKH	3694

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

Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original
1	1	-	17												
-	2														
-	3														
-	4														
-	5														
-	6														
-	7														
2	8														
3	9														
-	10														
-	11														
-	12														
-	13														
-	14														
-	15														
4	16														

NONE (Assistant Examiner)	(Date)	**Total Claims Allowed:** 4	
/MOHAMMAD Z SHAIKH/ Primary Examiner.Art Unit 3694 (Primary Examiner)	03/31/2017 (Date)	O.G. Print Claim(s) 1	O.G. Print Figure 6

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14636674	COLNOT ET AL.
	Examiner	Art Unit
	MOHAMMAD Z SHAIKH	3694

CPC- SEARCHED		
Symbol	Date	Examiner
G06Q 20/3272	5/14/2015	/MZS/
G06Q 20/3278	5/14/2015	/MZS/
G06K19/07	9/15/2015	/MZS/
H04M2250/14	9/15/2015	/MZS/
G06Q20/34	9/15/2015	/MZS.
G06Q20/123	9/15/2015	/MZS/
G06Q20/341	9/15/2015	/MZS/
G06Q20/20 OR G06Q20/32 OR G06Q20/325 OR G06Q20/34 OR G07F7/0873 OR G07F7/0886	6/29/2016	/MZS/
G06Q20/32 OR G06Q20/3272 OR G06Q20/341 OR H04M2250/14	1/12/2017	/MZS/
G06Q20/20 OR G06Q30/0601 OR H04M2250/14	3/30/2017	/MZS/

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner

SEARCH NOTES		
Search Notes	Date	Examiner
EAST	5/14/2015	/MZS/
EAST	9/15/2015	/MZS/
EAST	6/29/2016	/MZS/
EAST	1/12/2017	/MZS/
EAST	3/30/2017	/MZS/
CONSULTED WITH SPE KAMBIZ ABDI REGARDING 112 1ST ISSUES, AND PRIORITY	3/30/2017	/MZS/

	/MOHAMMAD Z SHAIKH/ Primary Examiner.Art Unit 3694

INTERFERENCE SEARCH			
US Class/ CPC Symbol	**US Subclass / CPC Group**	**Date**	**Examiner**
	INTERFERENCE DATABASES	3/30/2017	/MZS/

	/MOHAMMAD Z SHAIKH/ Primary Examiner.Art Unit 3694

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Alexandria, Virginia 22313-1450
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/636,674	03/03/2015	Vincent Cedric Colnot	P1987.02	3697

24739 7590 01/20/2017

CENTRAL COAST PATENT AGENCY, INC
3 HANGAR WAY SUITE D
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EXAMINER
SHAIKH, MOHAMMAD Z

ART UNIT	PAPER NUMBER
3694	

NOTIFICATION DATE	DELIVERY MODE
01/20/2017	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):

officeactions@CENTRALCOASTPATENT.COM
plambuth@centralcoastpatent.com

Office Action Summary	Application No. 14/636,674	Applicant(s) COLNOT ET AL.	
	Examiner MOHAMMAD Z. SHAIKH	Art Unit 3694	AIA (First Inventor to File) Status No

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

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10/14/16*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ 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.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5)☒ Claim(s) *1,8,9 and 16* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1, 8-9, 16* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, 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.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ 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)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☒ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date *10/14/16*.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

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

DETAILED ACTION

2. This Final office action is in response to an amendment received on 10/14/16.

3. Claims 1, 8-9, 16 are amended. Claims 1, 8-9, 16 are pending.

Note:

There are two issues the amended claims have brought out:

1). A 112, 1st rejection as the amended claim elements are not supported in the instant disclosure.

2). The specification has new matter from the original filing and therefore the instant application is not a continuation but a CIP.

Applicant amended their claims. In reviewing support for the amended claims it was determined the current application does not teach the amended claim elements. This led to a review of parent applications where it was determined the instant application is not a continuation but a CIP of the previously filed applications.

As it stands there is a new 35 USC 112, 1st rejection but also the claims now read on more recent prior art as the claims would not get the priority date of the earlier filed applications as new matter has been added. Therefore the filing date of the instant application is used for prior art purposes.

The Examiner will reconsider the prior art rejections if Applicant can show that: 1) the amended claims are supported; and 2) the specification does not add new matter.

RESPONSE TO ARGUMENTS

Claim Rejections- 35 U.S.C §112

The 35 U.S.C 112 second paragraph rejection for claim 1 has been withdrawn.

Claim Rejections- 35 U.S.C § 101

The 35 U.S.C 101 rejections for claims 9, 16-17 are hereby withdrawn.

Applicant argues

Applicant's claim as amended, and presented above now positively recites that the output pin is a part of the card reader. Applicant points out that the art of Deepquest fails to teach this limitation.

Examiner Response

This is a new limitation, applicant is directed to the 35 U.S.C 102 rejection that follows in this office action.

Applicant argues

Deepquest is silent as to an ability to send the data to an Internet connected server, as claimed.

Examiner Response

Deepquest was not cited for this limitation, Goldthwaite was cited (At least: [0021], Fig 1).

Applicant argues

Applicant believes that the fact Goldthwaite discloses only means to receive and store digitally actually teaches away from receiving and converting varialbe voltage analog audio signals at a microphone port as claimed.

Examiner Response

This is a new limitation, and is being disclosed in the 35 U.S.C 102(b) rejection in this office action.

Applicant argues

Dependent claims 8 and 16, as amended, recite that the coded instructions, when executed on a processor in the smart telephone, retrieve a card verification code (CVV) from the transaction data provided by the card reader, and use the CVV in purchases or transactions. The Examiner relies upon Sahota to disclose wherein the coded instructions provide functionality to retrieve a card verification code (CVV) (At least: Abstract; Figs: 3,6,7). Applicant will first point out that the claim limitation of claims 8 and 16, as amended, recite: The apparatus of claim 1 wherein the coded instructions, when executed on a processor in the smart telephone, retrieve a card verification code (CVV) from the transaction data provided by the card reader, and use the CVV in purchases or transactions. Applicant points out that this claim should not be interpreted in isolation as it depends directly from their respective independent claims which state the transaction data is received from a transaction card and the coded instruction *retrieves* the CVV

from this data. Sahota teaches col. 6,11. 40-48: *Once all nibbles in Block G have been twice examined as described, the three most-significant (i.e. leftmost) nibbles of the holding string are extracted 325. This 3-digit value is the dCW for the transaction. Other numbers of bits may be extracted from the twice-examined nibble string to generate the dCW for a transaction. Furthermore, different nibbles, such as the rightmost nibbles, may be used as the dCW for a transaction. The three leftmost nibbles, however, represent a preferred embodiment.* Applicant points out that the "nibbles" used to generate the dCW in Sahota are not retrieved from the actual transaction card data, as claimed. Applicant argues this is an important point because, unless it is retrieved from the actual transaction data captured from the transaction card, the transaction server would not be able to verify the CVV to approve a purchase, as claimed. The data contained in nibbles is generated data and not data directly retrieved from the actual transaction card (see Sahota col. 5,11. 6-34). Sahota teaches that dCVV is created on the fly to enable a transaction and NOT *retrieved* from data captured from a transaction card, as claimed, but created/generated as a unique dCVV for each transaction. Applicant believes claims 1 and 9, as amended are patentable over the art provided by the Examiner. Claims 8 and 16 are patentable, as amended and argued, above, or at least as depended upon a patentable claim.

Examiner Response

This is a new limitation, and is being disclosed in the 35 U.S.C 102(b) rejection in this office action.

Claim Rejections- 35 U.S.C § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112(a):

> (a) IN GENERAL.—The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor or joint inventor of carrying out the invention.

The following is a quotation of the first paragraph of pre-AIA 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims **1, 8-9, 16** are rejected under 35 U.S.C. 112(a) or 35 U.S.C. 112 (pre-AIA), first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor or a joint inventor, or for pre-AIA the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claims 1, 16, applicant does not have support in the instant specification for the amended limitations, "*a card reader having an input interface configured to accept transaction data from an output interface of a transaction card, and an output pin, as a part of the card reader, configured to directly connect the card reader in a microphone port of a smart telephone, the card reader providing data accepted from the output interface of the transaction card to the output pin, and hence to the microphone port, as an analog variable voltage audio signal", wherein the coded instructions, when executed on a*

processor, in the smart telephone, convert the analog variable voltage audio signal on the microphone port to the transaction data as digital data" in the originally filed specification in the instant application (14/636,674).

On page 3 of the specification discloses on page 18-24, that the card reader is engaged in a microphone port of the *computerized appliance".* The “computerized appliance on page 13, lines 13-14, that the computing appliance can be a PC". Examiner cannot find in the specification where the "computerized appliance" is a "smart phone".

Applicant refers to page 11, lines 8-15, however in this embodiment of Fig 4, there is no card reader disclosed at all, that would be connected to the microphone port of a smart phone.

Furthermore for the limitations, "*wherein the coded instructions, when executed on a processor, in the smart telephone, convert the analog variable voltage audio signal on the microphone port to the transaction data as digital data”*

The specification does not disclose a processor of smart phone converting the signals from analog to digital. Page 3, lines 1-3, of the specification disclose that the "computerized appliance" is performing these steps.

Regarding claims 8, 16, the instant specification does not have support for, “the coded instructions *when executed on a processor in the smart phone* retrieve a card verification (CVV) from the transaction data provided by the card reader and use the CVV in purchases or transactions.”

The specification in page 3, discloses that the processor in the computerized appliance comprises the coded instructions to accept the CVV transaction data, *not the smart telephone.*

Priority

This application repeats a substantial portion of prior Application No. 11/533,030, filed on 9/19/06, and adds disclosure not presented in the prior application. Because this application names the inventor or at least one joint inventor named in the prior application, it may constitute a continuation-in-part of the prior application. Should applicant desire to claim the benefit of the filing date of the prior application, attention is directed to 35 U.S.C. 120, 37 CFR 1.78, and MPEP § 211 *et seq.*

The specification has new matter from the original filing and therefore is not a continuation but a CIP.

Applicant states on page 1 of the instant application, that the instant invention is a continuation of application (14/524,842), filed on 10/27/14, which is a continuation of application (11/533,830), filed on 9/19/06, which claims priority to provisional application 60/719,273 (filed on 9/20/05).

MPEP 211.05 and 201.08 states:

The disclosure of a continuation application must be the same as the disclosure of the prior-filed application; i.e., the continuation must not include anything which would constitute new matter if inserted in the original application. See MPEP § 201.07. The disclosure of a divisional application must be the same as the disclosure of the prior-filed application, or include at least that portion of the disclosure of the prior-filed application that is germane to the invention claimed in the divisional application. See *MPEP § 201.06*. The disclosure of a continuation or divisional application cannot include anything which would constitute new matter if inserted in the prior-filed application. A continuation-in-part application may include matter not disclosed in the prior-filed application. See *MPEP § 201.08*

MPEP 201.08:

A continuation-in-part is an application filed during the lifetime of an earlier nonprovisional application, repeating some substantial portion or all of the earlier nonprovisional application and ***adding matter not disclosed in the said earlier nonprovisional application****. A continuation-in-part application may only be filed under 37 CFR 1.53(b).* The continuation-in-part application must claim the benefit of the prior nonprovisional application under *35 U.S.C. 120, 121, 365(c),* or *386(c).* For more information on claiming the benefit of a prior nonprovisional application, see *MPEP § 211* et seq. A continuation-in-part application CANNOT be filed as a continued prosecution application (CPA) under *37 CFR 1.53(d).*

However, upon examination of the amended claims, examiner has discovered that applicant has added new matter to the claims.

Now turning to the instant application, pages 2, lines 21-28, and pages 3, lines 1-28, and page 4, lines 1-12, from the instant specification as filed, constitute new matter. This part of the disclosure was not included in the prior filed application as filed (application 11/533,030).

Because of these findings, the claims no longer receive the early filing date, since the application is a CIP and not a continuation. Applicant will receive the filing date of the instant application (3/03/15).

Claim Rejections -35 U.S.C § 102

4. The following is a quotation of the appropriate paragraphs of pre-AIA 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 8-9, 16 are being rejected under 35 U.S.C 102(b) as being anticipated by US Patent 9,016,572 to Babu et al, herein Babu.

Regarding claim 1, Babu discloses: 1. (Currently amended) An apparatus comprising:

a card reader having an input interface configured to accept transaction data from an output interface of a transaction card, and an output pin as a part of the card reader, configured to directly connect the card reader in a microphone port of a smart telephone, the card reader providing data accepted from the output interface of the transaction card to the output pin, and hence to the microphone port, as an analog variable voltage audio signal (At least Abstract, column 19: lines 17-33, Fig 8, column 8 lines 18-32; Fig 16C: *the card reader connected to microphone port of smart phone*)): and

coded instructions stored in a non-transitory medium of a first Internet-connected server, and accessible by a user of the card reader; wherein the coded instructions, when executed on a processor in a the smart telephone, convert the analog variable voltage audio signal on the microphone port to the transaction data as digital data (At least: column 10: lines 25-31; Fig 14 and associated text), establish direct data exchange between a the smart telephone and a second Internet-connected server and facilitate transactions by a financial institution or purchases from an on-line merchant, using the transaction data (At least: Fig 1; Fig 16E, Fig 16F; column 15: lines 39-62).

Regarding claim 9, Babu discloses: a method comprising:

accepting transaction data from a transaction card at an input interface of a card reader having an output pin as a part of the card reader, the output pin directly connecting the card reader in a microphone port of a smart telephone (At least Abstract, column 19: lines 17-33, Fig

8, column 8 lines 18-32; Fig 16C: *the card reader connected to microphone port of smart phone*):

receiving the transaction data in a the smart telephone as an analog variable voltage signal from a the microphone port of the smart telephone (At least: Fig 16C: *card reader connected to microphone of smart phone*; column 7: lines 23-41 (*"As the card moves past the read head 16, magnetic transitions representing data induce a voltage or waveform (analog data).. This waveform is sent via the signal plug into the socket which is registered by the microphone of the mobile device connected to the reader;* column 8: lines 23-26);

converting the transaction data as an analog variable voltage signal in the smart telephone to digital transaction data (At least: column 10: lines 25-30; Fig 14 and associated text)

establishing direct data exchange with an Internet-connected server providing services to a financial institution or an on-line merchant by executing coded instructions on a processor in the smart telephone (At least: (At least: Fig 1; Fig 16E, Fig 16F; column 15: lines 39-62) ; and

facilitating transactions with the financial institution or purchases from the on-line merchant, using the transaction data (At least: Fig 1; Fig 16E, Fig 16F; column 15: lines 39-62).

Regarding claim 8, Babu discloses the apparatus of claim 1 wherein the coded instructions, when executed on a processor in the smart telephone, retrieve a card verification code (CVV) from the transaction data provided by the card reader, and use the CVV in purchases or transactions (At least: column 18: lines 12-17; column 31: lines 30-34; column 21: lines 14-18).

Claim 16 is being rejected using the same rationale as claim 8.

Claim Rejections- 35 U.S.C § 103

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

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1, 9, 17 are being rejected under 35 U.S.C 103(a) as being unpatentable over "Turning your mobile into a magnetic stripe reader", Deepquest, April 13, 2005, pgs 1-6, herein Deepquest in view of US 2004/0230489 to Goldthwaite, et al, herein Goldthwaite.

Regarding claim 1, Deepquest discloses:

An apparatus comprising:

a card reader having an input interface configured to accept data from an output interface of a transaction card, and an output pin configured to engage in a microphone port of a smart telephone, the card reader providing data accepted from the output interface of the transaction card to the output pin *(At least: page 1: paragraph 2; page 2: paragraph starting with "Hardware")*;

wherein the coded instructions provide functionality for executing in a smart telephone, deriving digital data from the data provided by the card reader to a

microphone port of a smart telephone (*At least: page 1: paragraph 2; page 2: paragraph starting with "Hardware")*

However Deepquest does not disclose coded instructions stored in a non-transitory medium of a first Interconnected server, and accessible by a user of the card reader, establishing data exchange between a smart telephone and a second Internet-connected server providing services to a financial institution or an on-line merchant, and facilitating transactions by an owner of a
transaction card with the financial institution or purchases by the owner of the transaction
card with an on-line merchant.

Goldhwaite discloses coded instructions stored in a non-transitory medium of a first Interconnected server, and accessible by a user of the card reader (At least: [0021]), establishing data exchange between a smart telephone and a second Internet-connected server providing services to a financial institution or an on-line merchant(At least: Fig 1) , and facilitating transactions by an owner of a transaction card with the financial institution or purchases by the owner of the transaction card with an on-line merchant (At least: Fig 1; [0017], [0024],[0025]).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Deepquest's invention to include coded instructions stored in a non-transitory medium of a first Interconnected server, and accessible by a user of the card reader, establishing data exchange between a smart telephone and a second Internet-

connected server providing services to a financial institution or an on-line merchant, and facilitating transactions by an owner of a transaction card with the financial institution or purchases by the owner of the transaction card with an on-line merchant.

One of ordinary skill in the art would have been motivated to include coded instructions stored in a non-transitory medium of a first Interconnected server, and accessible by a user of the card reader, establishing data exchange between a smart telephone and a second Internet-connected server providing services to a financial institution or an on-line merchant, and facilitating transactions by an owner of a transaction card with the financial institution or purchases by the owner of the transaction card with an on-line merchant in order to ensure that the financial transaction is completed with minimum cost (Goldthwaite: [0009]).

Regarding claim 9, Deepquest discloses:

A method comprising:

receiving data in a smart telephone from a microphone port of the smart telephone (*At least: page 1: paragraph 2; page 2: paragraph starting with "Hardware")*

;

converting the data to digital data by executing coded instructions from a non-transitory medium on a processor in the smart telephone (At least: page 1: First paragraph: "Exploring my new Siemens MC60..... This suggests that the MC60 has a built in ADC ... during communication).

However Deepquest does not disclose establishing data exchange with an Internet-connected server providing services to a financial institution or an on-line merchant; and facilitating transactions by an owner of a transaction card with the financial institution or purchases by the owner of the transaction card with an on-line merchant.

Goldhwaite discloses establishing data exchange with an Internet-connected server providing services to a financial institution or an on-line merchant (At least: Fig 1); and facilitating transactions by an owner of a transaction card with the financial institution or purchases by the owner of the transaction card with an on-line merchant. (At least: Fig 1; [0017], [0024],[0025]).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Deepquest's invention to include establishing data exchange with an Internet-connected server providing services to a financial institution or an on-line merchant; and facilitating transactions by an owner of a transaction card with the financial institution or purchases by the owner of the transaction card with an on-line merchant.

One of ordinary skill in the art would have been motivated to include establishing data exchange with an Internet-connected server providing services to a financial institution or an on-line merchant; and facilitating transactions by an owner of a transaction card with the financial institution or purchases by the owner of the transaction card with an on-line merchant in order to ensure that the financial transaction is completed with minimum cost (Goldthwaite: [0009]).

Regarding claim 17, Deepquest discloses:

A smart telephone, comprising: a microphone port receiving data (At least: *t least: page 1: paragraph 2; page 2: paragraph starting with "Hardware")*; and

coded instructions executing on a processor of the smart telephone from a non- transitory medium; wherein the coded instructions provide functions for retrieving digital data from the data received on the microphone port (*At least: page 1: paragraph 2; page 2: paragraph starting with "Hardware").*

However Deepquest does not disclose establishing data exchange with an Internet- connected server providing services to a financial institution or an on-line merchant, and facilitating transactions by an owner of a transaction card with the financial institution or purchases by the owner of the transaction card with an on-line merchant.

Goldhwaite discloses establishing data exchange between a smart telephone and a second Internet-connected server providing services to a financial institution or an on-line merchant(At least: Fig 1) , and facilitating transactions by an owner of a transaction card with the financial institution or purchases by the owner of the transaction card with an on-line merchant (At least: Fig 1; [0017], [0024],[0025]).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Deepquest's invention to include establishing data exchange with an Internet- connected server providing services to a financial institution or an on-line merchant, and facilitating transactions by an owner of a transaction card with the financial institution or purchases by the owner of the transaction card with an on-line merchant.

One of ordinary skill in the art would have been motivated to include establishing data exchange with an Internet- connected server providing services to a financial institution or an on-line merchant, and facilitating transactions by an owner of a transaction card with the financial institution or purchases by the owner of the transaction card with an on-line merchant in order to ensure that the financial transaction is completed with minimum cost (Goldthwaite: [0009]).

8. Claims 8,16 are being rejected under 35 U.S.C 103(a) as being unpatentable over Deepquest in view of Goldthwaite and further in view of US Patent 7,761,374 to Sahota et al, herein Sahota and further in view of US 2004/039919 to Takayama et al, herein Takayama.

Regarding claim 8, Deepquest discloses the apparatus of claim 1. Deepquest does not disclose, however Sahota discloses wherein the coded instructions provide functionality to retrieve a card verification code (CVV) (At least: Abstract; Figs: 3,6,7).

Sahota does not specifically disclose the card verification code (CVV) as a digital string from the data provided from the card reader, to use the CVV in the purchases or transactions by the owner of the transaction card.

Takayama discloses the card verification code (CVV) as a digital string from the data provided from the card reader, to use the CVV in the purchases or transactions by the owner of the transaction card (At least: Abstract; [0061], [0137],[0141],[0167],[0168]; Fig 8).

[0061] The first information may be virtually any information. **Examples of the first information include random numbers, credit card numbers**, telephone numbers, IP addresses, or even coded biological authentication information such as user's finger prints or user's iris code information etc. "The second information" corresponds to information to determine whether the relationship of itself and the first information is a predetermined relationship. For example, the second information may be information to determine whether it is the same as the first information**. Moreover, when the first information and the second information are expressed in a binary form, it may be information to determine whether the difference of the first information and the second information indicates predetermined differences.**

[0062] Note that, in the present invention, encrypted first information and the second information are assumed to be expressed as a digital signal. Therefore, the authentication request apparatus and the authentication apparatus in the present invention can be implemented by a digital computer**. Examples of digital computers include movable devices such as a mobile phone,** PDA (Personal Digital Assistant), etc. FIG. 33 shows examples of combinations of (1) encrypted first information, (2) the second information, and (3) conditions for determining whether the first information and the second information have a predetermined relationship.

[0137] The data structure of encrypted electronic credit 300 is shown in FIG. 3. Electronic credit which is an electronic credit before being encrypted comprises electronic credit information 301 indicating credit card number, expiration date, user's name, and credit card issuer etc.; digital signature 302 corresponding to electronic credit information 301, and value authentication information F(VPW) 303.

[0141] Credit card transaction terminal 3 extracts value authentication information F(VPW) from decrypted electronic credit (ev), calculates the hash function Hash(F(VPW).parallel.R) **concatenated to random number R, and verifies Hash(F(VPW').parallel.R) received from mobile phone 1.** When they are identical, the user is authenticated as the rightful owner of the electronic credit (211). When they are not identical, an error message is displayed. Moreover, credit card transaction terminal 3 verifies digital signature 302 (212), and when an error is detected, an error message to the user is displayed. When an error has not been detected in verification of digital signature 302 (212), credit card transaction terminal 3 transmits the result of the verification to mobile phone 1 (213), then further transmits authorization request of credit card transaction to center 2 (215). **Center 2 processes authorization (216) and transmits a response of authorization request to credit card transaction terminal 3 (217), so that the credit card transaction in credit card transaction terminal 3 is completed.** However, mobile phone 1, which received the authentication result, displays a message of completion of the credit card transaction process of electronic credit (214) and terminates credit card transaction process of electronic credit. Also in this

case, password input by user is deleted when the Java.TM. application for the credit card transaction is terminated.

Therefore it would be obvious to substitute the "CVV" of Sahota with the "**electronic credit information 301"** (Takayama uses a digital or binary representation of the credit information) and to include it in Deepquest's invention. One of ordinary skill in the art would have been motivated to make these modifications to Deeqpuest in order to ensure that the security of the financial transactions with an online merchant is not compromised.

Claim 16 is being rejected using the same rationale as claim 8.

CONCLUSION

5. 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 MOHAMMAD Z. SHAIKH whose telephone number is (571)270-3444. The examiner can normally be reached on Monday-Thursday (9:30-6).

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

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.

/MOHAMMAD Z SHAIKH/

Primary Examiner, Art Unit 3694

1/13/2017

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Notice of References Cited	Application/Control No. 14/636,674	Applicant(s)/Patent Under Reexamination COLNOT ET AL.	
	Examiner MOHAMMAD Z. SHAIKH	Art Unit 3694	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-9,016,572 B2	04-2015	Babu; Amish Rajesh	G06Q20/322	235/435
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*	M	US-9,262,777 B2	02-2016	Lamba; Kartik	G06Q20/322	1/1

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*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
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*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
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	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.

Doc code: IDS
Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (01-10)
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	14636674
Filing Date	2015-03-03
First Named Inventor	Vincent Cedric Colnot
Art Unit	3694
Examiner Name	Mohammad Z Shaikh
Attorney Docket Number	3697

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	14636674
	Filing Date	2015-03-03
	First Named Inventor	Vincent Cedric Colnot
	Art Unit	3694
	Examiner Name	Mohammad Z Shaikh
	Attorney Docket Number	3697

/M.Z.S/	1	VISDOMINE, LUIS PADILLA, Turning your mobile into a magnetic stripe reader, padilla@gae.ucm.es, My PGP public Key, http:/www.gae.ucm.es/~padilla/extrawork/mobilesoundtrack.html, August 30, 2004.	

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EXAMINER SIGNATURE

Examiner Signature	/MOHAMMAD Z SHAIKH/	Date Considered	01/12/2017

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	14636674
	Filing Date	2015-03-03
	First Named Inventor	Vincent Cedric Colnot
	Art Unit	3694
	Examiner Name	Mohammad Z Shaikh
	Attorney Docket Number	3697

CERTIFICATION STATEMENT

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	/Donald R. Boys/	Date (YYYY-MM-DD)	2016-10-14
Name/Print	Donald R. Boys	Registration Number	35074

This collection of information is required by 37 CFR 1.97 and 1.98. 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 1 hour 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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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.

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EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	4	"9016572".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/01/12 11:12
L2	1	"9016572".pn. and analog and digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/01/12 11:25
L3	1	"9016572".pn. and analog and digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/12 11:25
L4	1	"9016572".pn. and analog and merchant and mobile	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/12 11:29
L5	2	"9016572".pn. and method	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/12 11:44
L6	1	"9016572".pn. and analog and waveform and mobile	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/12 11:53
L7	1	"9016572".pn. and (convert or converting or digitize or digitizing)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/12 12:01
L8	1	"9016572".pn. and (convert or	US-PGPUB;	OR	ON	2017/01/12

		converting or digitize or digitizing or conversion)	USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			12:01
L9	1	"9016572".pn. and CVV	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/12 12:04
L10	705	"9016572".pn. and CVV or "card verification code"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/12 12:04
L11	1	"9016572".pn. and CVV and "card verification code"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/12 12:05
L12	16	CVV and "card verification code" and square	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/12 12:07
L13	3	"9183480".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/01/12 12:11
L14	1	"9183480".pn. and mobile and digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/01/12 12:11
L15	0	"9183480".pn. and mobile and digital and analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/01/12 12:11
L16	1	"9183480".pn. and mobile and digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	OFF	2017/01/12 12:12

			IBM_TDB			
L17	0	"9183480".pn. and mobile and (convert or converting or conversion)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/01/12 12:12
L18	0	(CVV or "card verification code") same (card near2 reader) same mobile same digital same microphone	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/12 12:15
L19	0	(CVV or "card verification code") same (reader) same mobile same digital same microphone	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/12 12:15
L20	0	(CVV or "card verification code") same (reader) same mobile same digital same mic	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/12 12:16
L21	0	(CVV or "card verification code") same (reader) same phone same digital same microphone	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/12 12:16
L22	32	((AUDIO OR MICROPHONE OR EARPHONE OR HEADSET) same (CONNECTOR OR JACK)) SAME (phone or wireless or portable or pda or tablet or "cellular phone" or "smart phone") SAME CARD SAME READER same transaction same (ADC or convert or conversion or "Analog to digital" or "A/D" or digitize or digitizing)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/12 13:30
S1	77	card same reader same (audio or sound or mic or microphone) same credit same analog same digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/05 13:53
S2	89	card same reader same (audio or sound or mic or microphone) same credit same analog same digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 13:53
S3	0	card same reader same (audio or	US-PGPUB;	OR	ON	2015/05/05

		sound or mic or microphone) same credit same analog same digital same (cvv or "credit verification value")	USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			13:53
S4	0	card same reader same (audio or sound or mic or microphone) same credit same analog same digital and (cvv or "credit verification value")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 13:53
S5	581	"l89" and (cvv or "credit verification value" or "security code" or code or pin or alias)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/05 13:54
S6	78	S2 and (cvv or "credit verification value" or "security code" or code or pin or alias)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/05 13:54
S7	1	"sound pass" same credit same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/05 14:00
S8	5	ohva and microphone	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/05 14:01
S9	34	("2004/0093496").URPN.	USPAT	OR	OFF	2015/05/05 14:03
S10	34	S9 and transaction and card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/05 14:03
S11	6607	(sound near2 card) same (mic or microphone or speaker) same (transaction or smart or debit or card or "stored value" or atm) same card same (reader or scanner or scan or read or reading)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:13
S12	1027	(sound near2 card) same (mic or microphone or speaker) same (transaction or smart or debit or card or "stored value" or atm) same card	US-PGPUB; USPAT; USOCR; FPRS;	OR	ON	2015/05/05 14:13

		same (reader or scanner or scan or read or reading) same analog same digital	EPO; JPO; DERWENT; IBM_TDB			
S13	63	(sound near2 card) same (mic or microphone or speaker) same (transaction or smart or debit or card or "stored value" or atm) same card same (reader or scanner or scan or read or reading) same analog same digital same signal	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:13
S14	2	(sound near2 card) same (mic or microphone or speaker) same ((transaction or smart or debit or card or "stored value" or atm) near2 card) same (reader or scanner or scan or read or reading) same analog same digital same signal	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:18
S15	405	(sound near2 card) same (mic or microphone or speaker) same ((transaction or smart or debit or card or "stored value" or atm) near2 card) same (reader or scanner or scan or read or reading) same analog same digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:19
S16	1	(sound near2 card) same (mic or microphone or speaker) same ((transaction or smart or debit or "stored value" or atm) near2 card) same (reader or scanner or scan or read or reading) same analog same digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:19
S17	2	(sound near2 card) same (mic or microphone or speaker) same ((transaction or smart or debit or "stored value" or atm) near2 card) same (reader or scanner or scan or read or reading) same converter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:19
S18	34	(computer or pda or table or phone or pda or device) same (mic or microphone or speaker) same ((transaction or smart or debit or "stored value" or atm) near2 card) same (reader or scanner or scan or read or reading) same converter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:21
S19	81	(computer or pda or table or phone or pda or device) same (mic or microphone or speaker) same (transaction or smart or debit or "stored value" or atm) same card same (reader or scanner or scan or read or reading) same converter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:23
S20	144	"Mag Tek"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/05 14:27
S21	1	S20 and (mic or microphone or speaker) same (transaction or smart	US-PGPUB; USPAT;	OR	ON	2015/05/05 14:28

		or debit or "stored value" or atm) same card same (reader or scanner or scan or read or reading) same converter	USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S22	1	S20 and (mic or microphone or speaker) same (transaction or smart or debit or "stored value" or atm) same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:28
S23	1	S20 and (mic or microphone or speaker) same (transaction or smart or debit or "stored value" or atm)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:28
S24	1	S20 and ((mic or microphone or speaker) same (transaction or smart or debit or "stored value" or atm))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:29
S25	678	audio same jack same card same reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/05 14:30
S26	205	audio same jack same card same reader same (financial or debit or transaction or credit or atm)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/05 14:31
S27	3	audio same jack same card same reader same (financial or debit or transaction or credit or atm) same converter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:31
S28	231	audio same jack same card same reader same (financial or debit or transaction or credit or atm)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:31
S29	20	audio same jack same card same reader same (financial or debit or transaction or credit or atm) same pin	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:31

S30	7	S29 AND ((G06Q20/3272 OR G06Q20/3278).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:38
S31	4	"20040093496"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/05 14:38
S32	3	"6708892".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 16:54
S33	1	"6708892".pn. and network	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 16:55
S34	0	"6708892".pn. and sequence	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 16:57
S35	0	"6708892".pn. and chip	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 16:57
S36	95	electronic same chip same digital same memory same amount same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 16:58
S37	28	electronic same chip same digital same memory same amount same card same (credit or debit or atm)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 16:59
S38	2	"6641050".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	OFF	2015/05/12 17:14

			DERWENT; IBM_TDB			
S39	1	"6641050".pn. and bit	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 17:14
S40	179	("6641050").URPN.	USPAT	OR	OFF	2015/05/12 17:16
S41	25	S40 and memory and chip and bit and card and (value or money)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 17:19
S42	20	electronic same chip same digital same memory same amount same card same analog same digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 17:21
S43	0	card near2 chip same credit same bit same analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 17:23
S44	0	card near7 chip same credit same bit same analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 17:23
S45	2	card same chip same credit same bit same analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 17:23
S46	255	card same chip same credit same bit	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 17:24
S47	76	card same chip same credit same bit same value	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 17:24

S48	28	card same chip same credit same bit same value same (conversion or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 17:24
S49	9	card same integrated same circuit same credit same bit same value same (conversion or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 17:25
S50	16	integrated same circuit same credit same bit same value same (conversion or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 17:30
S51	8	"integrated circuit" same credit same card same digital same converter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 17:34
S52	164	("5920628").URPN.	USPAT	OR	OFF	2015/05/12 17:39
S53	1	"7761374".pn. and (integrated or chip)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 17:45
S54	4	"5546462".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 17:47
S55	3	"6708892".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 17:49
S56	1	"6708892".pn. and (integrated or circuit or chip)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 17:50
S57	1	"7761374".pn. and (digital or analog)	US-PGPUB; USPAT; USOCR;	OR	OFF	2015/05/12 17:50

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S58	1	"6708892".pn. and (integrated or circuit or chip)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 17:52
S59	2	"6708892".pn. and smart	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 17:53
S60	4	"6607136".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 08:54
S61	2	"7334735".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 09:02
S62	1	"7334735".pn. and (card and converter)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 09:03
S63	1	"7334735".pn. and (card and digital and (convert or converting or converter)) and analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 09:06
S64	1	"7334735".pn. and (digital and (convert or converting or converter)) and analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 09:06
S65	1	"6708892".pn. and (digital and (convert or converting or converter)) and analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 09:08
S66	163	(digital near2 analog) same converter	US-PGPUB;	OR	OFF	2015/05/13

		same (credit or transaction or atm or debit) same card	USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			09:16
S67	292	(digital near2 analog) same converter same (credit or transaction or atm or debit) same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 09:16
S68	79	(digital near2 analog) same converter same (credit or transaction or atm or debit) same card same (sound or audio or mic or microphone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 09:17
S69	42	(digital near2 analog) same converter same ((credit or transaction or atm or debit) near3 card) same (sound or audio or mic or microphone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 09:20
S71	2	"7620759".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 09:37
S72	2	"6481623".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 09:40
S73	2	"6481623".pn. and (mic or microphone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 09:48
S74	3	"6708892".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 09:50
S75	1	"6708892".pn. and reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	OFF	2015/05/13 09:51

			IBM_TDB			
S76	1	"6708892".pn. and reader and (mic or microphone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 10:32
S77	1	"6607136".pn. and (mic or microphone) and computer and analog and signal and (convert or converting or converter)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 10:39
S78	1	"6607136".pn. and (mic or microphone) and computer and analog and signal and (convert or converting or converter) and reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 10:44
S79	1	"7334735".pn. and (mic or microphone) and computer and analog and signal and (convert or converting or converter) and reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 10:46
S80	15	("6708892").URPN.	USPAT	OR	OFF	2015/05/13 10:58
S81	5	"7118027".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:06
S82	2	"5763862".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:07
S83	2	"6481623".pn. and (mic or microphone) and reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:08
S84	117	("6481623").URPN.	USPAT	OR	OFF	2015/05/13 11:10
S85	2	"7225994".pn. and (mic or microphone) and reader and card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	OFF	2015/05/13 11:17

			IBM_TDB			
S86	106	("7225994").URPN.	USPAT	OR	OFF	2015/05/13 11:18
S87	1	"20050263590" and (mic or microphone) and reader and card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:21
S88	491360	(computer or device) same (mic or microphone) sam reader same (Smart near2 card) same (convert or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:24
S89	405	(computer or device) same (mic or microphone) same reader same (Smart near2 card) same (convert or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:25
S90	504	(computer or device) same (mic or microphone) same reader same (Smart near2 card) same (convert or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 11:25
S91	127	(computer or device) near5 (mic or microphone) same reader same (Smart near2 card) same (convert or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 11:25
S92	122	(computer or device) near5 (mic or microphone) same reader same (credit near2 card) same (convert or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 11:29
S93	3	(computer or device) near5 (mic or microphone) near5 reader same (credit near2 card) same (convert or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 11:29
S94	5	(computer or device) near5 (mic or microphone) near7 reader same (credit near2 card) same (convert or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 11:30
S95	457	(computer or device) near5 (mic or	US-PGPUB;	OR	ON	2015/05/13

		microphone)same (card near2 reader) same (convert or converter or digital or analog)	USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			11:31
S96	93	(computer or device) near5 (mic or microphone)near5 (card near2 reader) same (convert or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 11:31
S97	106	(computer or device) near5 (mic or microphone)same (card near2 reader) same (convert or converter or digital or analog) same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 11:31
S98	251	"card reader" same audio same (mic or microphone) same computer	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:39
S99	3	"card reader" same audio same (mic or microphone) same computer same converter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:40
S100	98	"card reader" same audio same (mic or microphone) same computer same (analog or digital)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:40
S101	54	"reader" same audio same (mic or microphone) same computer same (analog or digital) same (credit or debit or smart)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:44
S102	44	"reader" same sound same (mic or microphone) same computer same (analog or digital) same (credit or debit or smart)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:46
S103	2	"5799036".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	OFF	2015/05/13 11:53

			IBM_TDB			
S104	0	"5799036".pn. and reader and microphone	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:54
S105	1	"5799036".pn. and card and microphone	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:54
S106	94	("5799036").URPN.	USPAT	OR	OFF	2015/05/13 11:56
S107	1	S63 and "Card reader"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:56
S108	0	S106 and "Card reader"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:57
S109	10	S106 and "reader"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:57
S110	1	"card reader" same device same microphone same transaction same ("a/d" or "analog to digital" or "d/a" or "digital to analog")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:58
S111	1	"reader" same device same microphone same transaction same ("a/d" or "analog to digital" or "d/a" or "digital to analog")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:59
S112	10	"card reader" same device same microphone same ("a/d" or "analog to digital" or "d/a" or "digital to analog")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:59
S113	5	"card reader" same (phone or	US-PGPUB;	OR	OFF	2015/05/13

		computer or table or pda) same microphone same ("a/d" or "analog to digital" or "d/a" or "digital to analog")	USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			12:00
S114	6	"7810729".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 12:03
S115	7	"20020030871"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 12:07
S116	2	"20020030871" and converter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 12:07
S117	0	"20020030871" and digital and microphone and reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 12:08
S118	4	"7918394".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 12:09
S119	1	"6481623".pn. and network	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 16:21
S120	0	"6481623".pn. and network	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:21
S121	0	"6481623".pn. and internet	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:21
S122	0	"6481623".pn. and lan	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:21
S123	0	"6481623".pn. and wan	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:22
S124	1	"6481623".pn. and line	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:22
S125	1	"6481623".pn. and bit	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:24

S126	1	"6481623".pn. and "0"	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:24
S127	1	"6481623".pn. and "0" and (circuit or chip)	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:26
S128	1	"6481623".pn. and "128"	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:29
S129	1	"6481623".pn. and "40"	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:30
S130	1	"6481623".pn. and S128	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:30
S131	22	((digital to analog) or (a/d)) same converter same credit same data same reader same (microphone or audio or sound)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/14 10:11
S132	22	((digital to analog) or (d/a)) same converter same credit same data same reader same (microphone or audio or sound)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/14 10:13
S133	297	((digital to analog) or (d/a)) same credit same data same reader same (microphone or audio or sound)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/14 10:14
S134	297	((digital to analog) or (d/a)) same credit same data same reader same (microphone or audio or sound) same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/14 10:14
S135	2	(("digital to analog") or ("d/a")) same credit same data same reader same (microphone or audio or sound) same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/14 10:16
S136	2	(("digital to analog") or ("d/a")) same credit same data same reader same (microphone or audio or sound)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/14 10:16
S137	2	(("digital to analog") or ("d/a")) same credit same data same (scanner or reader) same (mic or microphone or audio or sound)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/14 10:17

S138	1	(("digital to analog") or ("d/a")) same transaction same data same (scanner or reader) same (mic or microphone or audio or sound)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/14 10:17
S139	24	(convert or converting or conversion) same (("credit card") near2 (data or information)) same analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/14 10:47
S140	5	"20030076045"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/14 11:11
S141	3	"KR 20030076045"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/14 11:12
S142	0	"blue toot typed portable credit card reader"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/14 11:17
S143	3	"blue tooth typed portable credit card reader"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/14 11:17
S144	4	"6607136".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/14 11:39
S145	2	"7761374".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/14 11:42
S146	14	"blue tooth" near2 "credit card"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	OFF	2015/05/14 12:09

			DERWENT; IBM_TDB			
S147	14	"blue tooth" near2 "credit card"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/14 12:09
S148	0	sound near2 key same microphone same credit same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:02
S149	133	sound same key same microphone same credit same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:02
S150	54	sound same key same microphone same credit same card same reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:02
S151	147	sound same microphone same credit same card same reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:03
S152	54	sound same microphone same credit same card same reader same key	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:03
S153	246	microphone same credit same card same reader same audio	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:13
S154	215	microphone same credit near3 card same reader same audio	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:13
S155	1946	microphone same credit near3 card ena3reader same audio	US-PGPUB; USPAT; USOCR;	OR	ON	2015/06/16 11:14

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S156	83	microphone same credit near3 card near3 reader same audio	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:14
S157	3	microphone same credit near3 card near3 reader near4 audio	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:14
S158	190	(headphones or mic or speaker) same credit near3 card near3 reader same audio	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:20
S159	18	(headphones or mic or speaker) same credit near3 card near3 reader near5 audio	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:21
S160	5	(headphones or mic or speaker) same credit near3 card near3 reader same audio same (digital) same analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:21
S161	7	(headphones or mic or speaker) same credit near3 card same reader same audio same (digital) same analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:22
S162	7	(headphones or mic or speaker) same credit same card same reader same audio same (digital) same analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:22
S163	86	(headphones or mic or speaker) same (debit or transaction or gift or prepaid or atm or credit) same card same reader same audio same (digital) same analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:23
S164	78434	(system same "Computer readable	US-PGPUB;	OR	OFF	2015/06/16

		medium").clm.	USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			12:21
S165	2584	S164 and 705/35-45.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/06/16 12:22
S166	9498	(system near3 "Computer readable medium").clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/06/16 12:22
S167	1	"US 20150178719"	US-PGPUB; USPAT; USOCR; DERWENT	OR	OFF	2015/07/07 11:19
S168	0	"G06 20/34" AND PAYMENT AND READER	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 11:26
S169	0	"G06 20/34" AND PAYMENT	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 11:26
S170	0	"G06 20/34"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/07/07 11:26
S171	11	"G06Q 20/34" AND READER	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/07/07 11:27
S172	3	"G06Q 20/34" AND MICROPHONE	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/07/07 11:31
S173	26	"G06Q 20/40" AND MICROPHONE	US-PGPUB; USPAT;	OR	ON	2015/07/07 11:32

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S174	94	("5799036").URPN.	USPAT	OR	OFF	2015/07/07 12:39
S175	1252	(converter or conversion) same signal same card same data same (mic or microphone or speaker)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/07/07 12:44
S176	55	(converter or conversion) same signal same card same data same (mic or microphone or speaker) same (credit or debit or transaction or debit or gift or "store value card")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/07/07 12:45
S177	68	(digital and analog) same signal same card same data same (mic or microphone or speaker) same (credit or debit or transaction or debit or gift or "store value card")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/07/07 12:49
S178	11	("2004/0026506").URPN.	USPAT	OR	OFF	2015/07/07 12:54
S179	1736	(convert or converting or conversion) same credit same card same data	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 12:57
S180	344	(convert or converting or conversion) same credit same card same data same reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 12:57
S181	70	(convert or converting or conversion) same credit same card same data same reader same (mic or speaker or microphone or "Recording device")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 12:57
S182	143	(convert or converting or conversion) same credit same card same data same reader same (mic or speaker or microphone or "Recording device")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/07/07 12:57
S183	14	"9003508".pn.	US-PGPUB; USPAT;	OR	OFF	2015/07/07 14:33

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S184	2	"20050276270"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 17:50
S185	1	"20050276270" and digital and microphone and reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 17:50
S186	10574	digital and microphone and reader and modulation	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 17:53
S187	2377	digital and microphone and reader and modulation and "credit card"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 17:54
S188	1982	digital and microphone and reader and modulation and "credit card" and analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 17:54
S189	869	digital same microphone and reader and modulation and "credit card" and analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 17:54
S190	62	digital same microphone same reader and modulation and "credit card" and analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 17:54
S191	212	digital same microphone same reader and modulation and "card" and analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 17:57

S192	173	digital same microphone same reader and modulation and "card" and analog and (converter or conversion or converting)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 17:57
S193	63	digital same microphone same reader and modulation and "card" and analog and (converter or conversion or converting) and (transaction or credit or debit or atme)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 17:58
S194	66	digital same microphone same reader and modulation and "card" and analog and (converter or conversion or converting) and (transaction or credit or debit or atm)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 17:59
S195	103	digital same microphone same reader and modulation and "card" and analog and (converter or conversion or converting) and (transaction or credit or debit or atm)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/07/07 17:59
S196	42	personal near2 secure near2 information near2 device	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 10:29
S197	47	personal near2 secure near2 information near2 device	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 10:30
S198	17	S197 and (mic or microphone or speaker or audio)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 10:34
S199	0	"reader for integrated circuit card used as a e.g. bank card, credit card"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 10:43
S200	0	"reader for integrated circuit card used as a e.g. bank card, credit card"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	ON	2015/09/10 10:43

			DERWENT; IBM_TDB			
S201	32	reader same "integrated circuit card" same bank same card same (mic or microphone or speaker or audio)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 10:44
S202	0	reader same "integrated circuit card" same bank same card same (mic or microphone or speaker or audio) same (converter or conversion or converting)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 10:44
S203	28	reader same "integrated circuit card" same bank same card same (mic or microphone or speaker or audio) and (converter or conversion or converting)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 10:44
S204	1	acoustic same transducer same earphone same reader same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 10:46
S205	1	acoustic same transducer same earphone same reader same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 10:47
S206	1	acoustic same (converter or conversion or converting) same earphone same reader same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 10:48
S207	332	(audio or sound or acoustic) same (converter or conversion or converting) same (mic or microphone or speaker or earphone) same reader same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 10:48
S208	23	(audio or sound or acoustic) same (converter or conversion or converting) same (mic or microphone or speaker or earphone) same reader same card same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 10:49
S209	5	"20120052910"	US-PGPUB; USPAT; USOCR;	OR	OFF	2015/09/10 10:56

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S210	2	"7896248".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 10:57
S211	0	mobile same magnetice same reader same (audio or microphone or sound or acoustic or mic or speaker or earphone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 11:04
S212	997	mobile same magnetic same reader same (audio or microphone or sound or acoustic or mic or speaker or earphone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 11:04
S213	29	mobile same magnetic same reader same (audio or microphone or sound or acoustic or mic or speaker or earphone) same pin	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 11:04
S214	162	mobile same card same reader same (audio or microphone or sound or acoustic or mic or speaker or earphone) same pin	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 11:08
S215	103	mobile same card same reader same (audio or microphone or sound or acoustic or mic or speaker or earphone) same pin same (analog or digital)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 11:08
S216	77	mobile same card same reader same (audio or microphone or sound or acoustic or mic or speaker or earphone) same transaction same (analog or digital)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 11:11
S217	370	(phone or device or pda or tablet or laptop or computer) same card same reader same (audio or microphone or sound or acoustic or mic or speaker or earphone) same transaction same (analog or digital)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 11:12
S218	455	(phone or device or pda or tablet or	US-PGPUB;	OR	ON	2015/09/10

		laptop or computer) same card same reader same (audio or microphone or sound or acoustic or mic or speaker or earphone) same (convert or converting or conversion) same (analog or digital)	USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			11:13
S219	95	(phone or device or pda or tablet or laptop or computer) same card same reader same (audio or microphone or sound or acoustic or mic or speaker or earphone) same (convert or converting or conversion) same (analog or digital) same pin	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 11:13
S220	90	(phone or device or pda or tablet or laptop or computer) same card same reader same (audio or microphone or sound or acoustic or mic or speaker or earphone) same (convert or converting or conversion) same (analog or digital) same (output) same pin	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 11:14
S221	6	output same (plug or pin) same jack same (audio or speaker or mic or microphone or headset or earphone) same analog same digital same reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 11:17
S222	39	output same (plug or pin) same jack same (audio or speaker or mic or microphone or headset or earphone) same analog same digital same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 11:20
S223	0	output same (plug or pin) same jack same (audio or speaker or mic or microphone or headset or earphone) same analog same digital same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 11:25
S224	26	output same (plug or pin or jack) same (audio or speaker or mic or microphone or headset or earphone) same analog same digital same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 11:25
S225	7	"20020030871"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 12:46
S226	3	"20050247787"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	OFF	2015/09/10 12:51

			DERWENT; IBM_TDB			
S227	8	"20040093436"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 12:59
S228	2	"6481623".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 13:00
S229	122	("6481623").URPN.	USPAT	OR	OFF	2015/09/10 13:03
S230	8	"20040093436"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 13:11
S231	3	("2004/0093436").URPN.	USPAT	OR	OFF	2015/09/10 13:11
S232	36	(modem or modulation or demodulation) same reader same card same analog same digital same smart	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 13:14
S233	15	(modem or modulation or demodulation) same reader same card same analog same digital same smart same (plug or jack or port) same (audio or sound or acoustic)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 13:14
S234	8	"20020091633"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 14:54
S235	16	("2002/0091633").URPN.	USPAT	OR	OFF	2015/09/10 14:57
S236	0	"20020091633" and analog	USPAT	OR	OFF	2015/09/10 14:59
S237	0	"20020091633" and analog	USPAT	OR	ON	2015/09/10 15:00
S238	0	"20020091633" and convert	USPAT	OR	ON	2015/09/10 15:00
S239	1	"20020091633" and analog	US-PGPUB; USPAT; USOCR;	OR	ON	2015/09/10 15:00

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S240	611	card same reader same digital same analog same credit	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:02
S241	33	card same reader same digital same analog same credit same converter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:02
S242	39	card same reader same digital same analog same transaction same converter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:04
S243	10	card same reader same ("a/d" or "d/a") same transaction same converter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:05
S244	1	card same reader same ("digital to analog" or "d/a") same transaction same converter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:07
S245	2	card same reader same ("digital to analog" or "d/a") same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:08
S246	27	card same reader same ("digital to analog" or "d/a") same audio	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:08
S247	3	card same reader same ("digital to analog" or "d/a") same payment	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:10
S248	0	card same reader same ("digital to	US-PGPUB;	OR	ON	2015/09/10

		analog" or "d/a") same financial	USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			15:10
S249	0	card same reader same ("digital to analog" or "d/a") same merchant	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:10
S250	2	transaction same card same reader same ("digital to analog" or "d/a")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:11
S251	96	card same reader same ("digital to analog" or "d/a")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:11
S252	3	"20040093436" and phone	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 15:29
S253	2615	(smart near2 phone) same microphone same (analog or digital or d/a or "digital to analog")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:30
S254	40	(smart near2 phone) same microphone same (analog or digital or d/a or "digital to analog") same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:31
S255	428	(smart near2 phone) same microphone same (analog or digital or d/a or "digital to analog") same (converter or conversion or converting)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:32
S256	22	(smart near2 phone) same microphone near3 (analog or digital or d/a or "digital to analog") same (converter or conversion or converting)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2015/09/10 15:33

			IBM_TDB			
S257	45	(smart near2 phone) same microphone near5 (analog or digital or d/a or "digital to analog") same (converter or conversion or converting)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:33
S258	4944	(phone or pda or tablet) same microphone same (analog or digital or d/a or "digital to analog") same (converter or conversion or converting)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:34
S259	37	(phone or pda or tablet) same microphone same (analog or digital or d/a or "digital to analog") same (converter or conversion or converting) same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:35
S260	442	(phone or pda or tablet) same microphone same (analog or digital or d/a or "digital to analog") same (converter or conversion or converting) same smart	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:37
S261	27	(phone or pda or tablet) same microphone same (analog or digital or d/a or "digital to analog") same (converter or conversion or converting) same smart same reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:37
S262	116	(phone or pda or tablet) same microphone same (analog or digital or d/a or "digital to analog") same (converter or conversion or converting) same reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:38
S263	5920	(phone or pda or tablet) same (mic or speaker or microphone or headphone) same (analog or digital or d/a or "digital to analog") same (converter or conversion or converting)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:42
S264	758	(phone or pda or tablet) same (mic or speaker or microphone or headphone) same (analog or digital or d/a or "digital to analog") same (converter or conversion or converting) same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:42
S266	11	"2002030871"	US-PGPUB; USPAT; USOCR; FPRS;	OR	OFF	2015/09/10 16:04

			EPO; JPO; DERWENT; IBM_TDB			
S267	11	"2002030871"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 16:04
S268	7	"20020030871"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 16:05
S269	3	"20050247787"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 16:05
S270	6	"7810729".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 16:06
S271	6	"7810729".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 16:06
S272	62	("20020002507" | "20020030871" | "20040087339" | "20040204074" | "20050247787" | "20070250623" | "20080059370" | "20080059375" | "4845740" | "5764742" | "5850599" | "6129277" | "6481623" | "6579728" | "7252232").PN. OR ("7810729").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2015/09/10 16:06
S273	1365880	pda with microphone with digital or audio	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 16:38
S274	689	pda with microphone with digital same audio	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 16:38
S275	546	pda with microphone with digital with	US-PGPUB;	OR	ON	2015/09/10

		audio	USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			16:38
S276	5	pda with microphone with digital with audio same conversion	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 16:39
S277	7	pda with microphone with digital same audio same conversion	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 16:41
S278	10	pda same microphone with digital same audio same conversion	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 16:44
S279	161	pda same microphone same digital same audio same conversion	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 16:44
S280	10	pda same microphone same digital same audio same conversion same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 16:44
S281	8	"20040093436"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/11 08:59
S282	3	"20040093436" and reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/11 09:00
S283	377	"colnot"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	OFF	2015/09/11 15:38

			IBM_TDB			
S284	55	"colnot" and analog and digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/11 15:38
S285	64	"colnot" and analog and digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/11 15:39
S286	14	"9003508".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/11 15:46
S287	3	"US 7620759"	US-PGPUB; USPAT; USOCR; DERWENT	OR	OFF	2015/09/11 15:49
S288	3	analog same digital same sound same generator same card same reader same (mic or microphone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/11 15:56
S289	3	analog same digital same (Acoustic or sound) same generator same card same reader same (mic or microphone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/11 15:56
S290	90	analog same digital same (Acoustic or sound) same (device or fob or ring or key) same card same reader same (mic or microphone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/11 15:57
S291	3	analog same digital same (Acoustic or sound) same (device or fob or ring or key) same card same reader same (mic or microphone) same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/11 15:57
S292	0	analog same digital same (Acoustic or sound) same (device or fob or ring or key) same card same reader same (mic or microphone) same (jack)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/11 15:57

S293	62	analog same digital same (Acoustic or sound) same (device or fob or ring or key) same card same reader same (mic or microphone) same (jack or output or connector)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/11 15:58
S294	143	(phone or pda or tablet) same (mic or speaker or microphone or headphone) same (analog or digital or d/a or "digital to analog") same (converter or conversion or converting) same card same (jack or plug or connector)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/15 11:57
S295	47	((digital near2 analog) or d/a) same converter same ((credit or transaction or atm or debit) near3 card) same (sound or audio or mic or microphone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/15 11:58
S296	14	S295 AND ((G06K19/07 OR H04M2250/14 OR G06Q20/34 OR G06Q20/123 OR G06Q20/341).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/15 11:59
S297	6	"7810729".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/23 15:34
S298	5	"20040087339"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/23 15:41
S299	0	"20040087339" and (mic or microphone or speaker)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/23 15:43
S300	19	"8701996".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/23 15:43
S301	17	"1747635"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	OFF	2015/10/23 15:44

			DERWENT; IBM_TDB			
S302	2	"20050236480" and (mic or microphone or speaker or audio)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/10/23 15:48
S303	160	("20010001856" | "20020002507" | "20020030871" | "20020077974" | "20020099648" | "20020108062" | "20020169541" | "20020188535" | "20030089772" | "20030132300" | "20030135463" | "20030144040" | "20040012875" | "20040041911" | "20040058705" | "20040087339" | "20040093496" | "20040104268" | "20040127256" | "20040128256" | "20040204074" | "20040230489" | "20040230526" | "20050077870" | "20050209719" | "20050219728" | "20050236480" | "20050242173" | "20050247787" | "20060049256" | "20060094481" | "20060122902" | "20060142058" | "20060208066" | "20060223580" | "20060234771" | "20060273158" | "20070067833" | "20070100651" | "20070124211" | "20070155430" | "20070174080" | "20070221728" | "20070244811" | "20070250623" | "20070255620" | "20070255653" | "20080027815" | "20080040265" | "20080040274" | "20080059370" | "20080059375" | "20080103972" | "20080147564" | "20080172306" | "20080177662" | "20080208762" | "20080238610" | "20080249939" | "20080275779" | "20090068982" | "20090098908" | "20090100168" | "20090104920" | "20090117883" | "20090119190" | "20090125429" | "20090144161" | "20090159681" | "20090187492" | "20100063893" | "20100108762" | "20100184479" | "20100191653" | "20100222000" | "20100243732" | "20100314446" | "20110084131" | "20110084139" | "20110084147" | "20110137803" | "20110161235" | "20110174879" | "20110180601" | "20110191196" | "20110198395" | "20110202463" | "20110258120" | "20110259957" | "20110313880" | "20120008851" | "20120012653" | "20120016794").PN. OR ("20120052910" | "20120246074" | "4035614" | "4254441" | "4591937" | "4609957" | "4845740" | "5266789" | "5434400" | "5463678" | "5589855" | "5603078" | "5729591" | "5764742" | "5850599" | "5878337" | "5945654" | "5991749" | "6006109" | "6021944" | "6032859" | "6061666" | "6129277" |	US-PGPUB; USPAT; USOCR	OR	OFF	2015/10/23 15:51

		"6234389" | "6308227" | "6363139" | "6400517" | "6431445" | "6476743" | "6481623" | "6497368" | "6536670" | "6579728" | "6612488" | "6813608" | "6832721" | "6850147" | "6868391" | "6896182" | "6944782" | "7003316" | "7013149" | "7149296" | "7163148" | "7167711" | "7252232" | "7309012" | "7324836" | "7363054" | "7409234" | "7433452" | "7505762" | "7506812" | "7520430" | "7581678" | "7600673" | "7708189" | "7793834" | "7810729" | "7869591" | "7896248" | "7918394" | "7945494" | "8015070" | "8231055" | "8376239" | "8413901" | "WO2010097711" | "WO2010111130" | "WO2010135174").PN.				
S304	68	S303 and (mic or microphone or speaker or audio) and reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/10/23 15:53
S305	2	"7376431".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 10:24
S306	0	"7376431".pn. and (mic or microphone or speaker)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 10:25
S307	0	"7376431".pn. and (mic or microphone or speaker or audi)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 10:25
S308	0	"7376431".pn. and (mic or microphone or speaker or audio)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 10:25
S309	4	"2001084816"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 10:34
S310	4	"2001084816"	US-PGPUB; USPAT; USOCR;	OR	ON	2015/10/26 10:34

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S311	1	"data output device and information collecting system comprising data output device"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 10:34
S312	3	"US 9003508"	US-PGPUB; USPAT; USOCR; DERWENT	OR	OFF	2015/10/26 11:27
S313	14	"9003508".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 11:28
S314	2	"US 20150178719"	US-PGPUB; USPAT; USOCR; DERWENT	OR	OFF	2015/10/26 11:46
S315	8	"20040104628"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 14:04
S316	5	"20040104268"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 14:05
S317	4	"20040093496"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 14:07
S318	0	"20040093496" and phone	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 14:26
S319	3	"20040093436" and phone	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 14:34

S320	1	"20150178719" and phone	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 14:39
S321	1	"20150178719" and phone	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/10/26 14:39
S322	163	"G06Q 20/341"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 15:10
S323	37	"G06Q 20/341" AND PHONE AND CARD AND READER	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 15:10
S324	795	235/380.CCLS. AND "CARD READER" AND (MICROPHONE OR MIC OR SPEAKER)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 15:19
S325	58	235/380.CCLS. AND "CARD READER" AND (MICROPHONE OR MIC OR SPEAKER) AND (SMART NEAR2 PHONE)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 15:19
S326	1	"20150178719" and modulation	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/10/26 15:32
S327	1	"20150178719" and (modulating or modulation or demodulate or demodulation) and reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/10/26 15:34
S328	1	"20150178719" and (modulating or modulation or demodulate or demodulation and modulated) and reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	ON	2015/10/26 15:34

			DERWENT; IBM_TDB			
S329	232	card same reader same (modulating or modulation or demodulate or demodulation and modulated) same mobile	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/10/26 15:45
S330	33	card same reader same (modulating or modulation or demodulate or demodulation and modulated) same mobile same microphone	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/10/26 15:46
S331	25	card same reader same (modulating or modulation or demodulate or demodulation and modulated) same phone same microphone	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/10/26 15:47
S332	1	card same reader same (modulating or modulation or demodulate or demodulation and modulated) same phone same mic	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/10/26 15:48
S333	25	card same reader same (modulating or modulation or demodulate or demodulation and modulated) same phone same speaker	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/10/26 15:48
S334	2	card same reader same (modulating or modulation or demodulate or demodulation and modulated) same pda same speaker	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/10/26 15:50
S335	2	card same reader same (modulating or modulation or demodulate or demodulation and modulated) same pda same speaker	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/10/26 15:50
S336	7	card same reader same (modulating or modulation or demodulate or demodulation and modulated) same square	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/10/26 16:23
S337	10	square.as. and microphone and "card reader" and "Smart phone"	US-PGPUB; USPAT; USOCR;	OR	OFF	2015/10/26 16:24

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S338	2	"62234389".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 16:29
S339	2	"6234389".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 16:30
S340	7	"8011587".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 16:31
S341	502	((smart or wireless or mobile or handheld or portable or cellular or cell) near2 (phone)) with (card near2 reader) same (audio or mic or microphone or headset or sound) same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/29 11:34
S342	319	((smart or wireless or mobile or handheld or portable or cellular or cell) near2 (phone)) with (card near2 reader) with (audio or mic or microphone or headset or sound) same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/29 11:35
S343	319	((smart or wireless or mobile or handheld or portable or cellular or cell) near2 (phone)) with (card near2 reader) with (audio or mic or microphone or headset or sound) with card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/29 11:35
S344	70	((smart or wireless or mobile or handheld or portable or cellular or cell) near2 (phone)) near3 (card near2 reader) with (audio or mic or microphone or headset or sound) with card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/29 11:35
S345	41	S343 AND ((G06Q20/20 OR G06Q20/32 OR G06Q20/325 OR G06Q20/34 OR G07F7/0873 OR G07F7/0886).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/29 11:56
S346	6	"7810729".PN.	US-PGPUB;	OR	OFF	2016/06/29

			USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			11:59
S347	7	"20020030871"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:04
S348	0	"20020030871" AND READER	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:05
S349	3	"20050247787"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:07
S350	0	"20050247787" AND (AUDIO OR MICROPHONE OR SOUND OR HEADSET OR EARPHONE)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:08
S351	0	"20050247787" AND (AUDIO OR MICROPHONE OR SOUND OR HEADSET OR EARPHONE)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/29 12:08
S352	83	(AUDIO NEAR2 JACK) SAME PHONE SAME CARD SAME READER	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:10
S353	144	((AUDIO OR MICROPHONE OR EARPHONE OR HEADSET) NEAR2 JACK) SAME PHONE SAME CARD SAME READER	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/29 12:12
S354	247	((AUDIO OR MICROPHONE OR EARPHONE OR HEADSET) NEAR2 (CONNECTOR OR JACK)) SAME PHONE SAME CARD SAME READER	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2016/06/29 12:12

			IBM_TDB			
S355	0	"73776431".PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:17
S356	2	"7376431".PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:17
S357	3	"8615445".PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:19
S358	1	"8615445".PN. AND "MICROPHONE PORT"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:20
S359	1	"8615445".PN. AND "MICROPHONE PORT"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/29 12:20
S360	0	"20010848816"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:25
S361	4	"2001084816"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:25
S362	0	"2001084816" AND MICROPHONE AND READER	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:26
S363	0	"20010035459" AND MICROPHONE AND READER	US-PGPUB; USPAT; USOCR; FPRS;	OR	OFF	2016/06/29 12:27

			EPO; JPO; DERWENT; IBM_TDB			
S364	6	"20010035459"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:27
S365	4	"6006109".PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:35
S366	0	"6006109".PN. AND READER	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:35
S367	0	"6006109".PN. AND CARD	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:36
S368	0	"6006109".PN. AND CARD	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/29 12:36
S369	81	("6006109").URPN.	USPAT	OR	OFF	2016/06/29 12:36
S370	49	S369 AND READER	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:36
S371	4	"5388148".PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:39
S372	64	("5388148").URPN.	USPAT	OR	OFF	2016/06/29 12:39
S373	20	S372 AND READER	US-PGPUB; USPAT; USOCR; FPRS;	OR	OFF	2016/06/29 12:40

			EPO; JPO; DERWENT; IBM_TDB			
S374	14	S372 AND READER AND (SOUND OR AUDIO OR MICROPHONE OR EARPHONE OR MIC OR HEADPHONE)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/29 12:42
S375	1	"6607136".PN. AND PHONE	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 12:35
S376	172	(SMART NEAR2 PHONE) SAME SERVER SAME INTERNET SAME TRANSACTION SAME (BANK OR "FINANCIAL INSTITUTION" OR MERCHANT OR RETAILER)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/30 12:37
S377	3	"7096003".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 14:52
S378	2	"20040230489"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 15:23
S379	52	microphone same port same mobile same server same reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/30 15:35
S380	1443	phone same (card near2 reader) same server	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 15:40
S381	557	(mobile near2 phone) same (card near2 reader) same server	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/30 15:41
S382	47	(mobile near2 phone) same (card near2 reader) same server same	US-PGPUB; USPAT;	OR	ON	2016/06/30 15:41

		microphone	USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S383	252	(mobile near2 phone) with (card near2 reader) same server	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/30 15:42
S384	168	(mobile near2 phone) with (card near2 reader) with server	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/30 15:42
S385	17	(cvv or "card verification value") same digital same (Data or string or code) same transaction same purchase	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 15:52
S386	43	"7761374" and digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 15:54
S387	1	"7761374".pn. and digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 15:54
S388	1	"7761374".pn. and (hash or cryptogram or digital)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 15:57
S389	23	(cvv or "card verification value") near2 (hash or cryptogram or digital)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 15:59
S390	266	(cvv or "card verification value") same (hash or cryptogram or digital)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:00

S391	141	(cvv or "card verification value") same (hash or cryptogram or digital) same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:00
S392	1311	(cvv or "card verification value") same (zero or one or logic or digital)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/30 16:05
S393	648	(cvv or "card verification value") same (zero or one or logic or digital) same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/30 16:05
S394	641	(cvv or "card verification value") same (zero or one or digital) same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/30 16:05
S395	100	(cvv or "card verification value") same (zero or digital) same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/30 16:06
S396	5	(cvv or "card verification value") near2 (digital) same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/30 16:07
S397	44	(cvv or "card verification value") with (digital) same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/30 16:08
S398	60	(cvv or "card verification value") with (digital)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/30 16:09
S399	10	(cvv or "card verification value") near3 (digital)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	ON	2016/06/30 16:09

			DERWENT; IBM_TDB			
S400	40	(cvv or "card verification value") near5 (digital)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/30 16:10
S401	42	(cvv or "card verification value") near5 (digital or zero)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/30 16:10
S402	246	(cvv or "card verification value") near5 (digital or zero or one)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/30 16:10
S403	179	colnot.in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:12
S404	4	S403 and cvv	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:12
S405	110	(card near2 reader) same ("card verification value" or cvv) same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:13
S406	11	(card near2 reader) same ("card verification value" or cvv) same transaction same (encrypt or encrypting or encryption)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:14
S407	16	("card verification value" or cvv) same transaction same (hash)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:20
S408	2	("card verification value" or cvv) same digital same (hash)	US-PGPUB; USPAT; USOCR;	OR	OFF	2016/06/30 16:21

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S409	97362	("card verification value" or cvv or (card near2 identifier or idenfication or identifying)) same digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:27
S410	2890	("card verification value" or cvv or (card near2 identifier or idenfication or identifying)) same digital same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:27
S411	700511	("card verification value" or cvv or (card near2 identifier or idenfication or identifying)) same digital same transaction (purchase or financial)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:27
S412	983	("card verification value" or cvv or (card near2 identifier or idenfication or identifying)) same digital same transaction same (purchase or financial)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:27
S413	71	(card near2 (identifier or idenfication or identifying)) same digital same transaction same (purchase or financial)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:29
S414	4	"09/754665"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:34
S415	9	"09/754465"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:35
S416	2	"20010037312" and digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:36
S417	35	digital near2 credit near2 card near2	US-PGPUB;	OR	OFF	2016/06/30

		data	USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			16:40
S418	2	"20090292642"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:51
S419	11	"20040039919"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:57
S420	0	"20040039919" and S384	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:58
S421	2	"20040039919" and "802"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:58
S422	2	"20040039919" and "802" and digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:59
S423	2	"20040039919" and signature	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 17:03
S424	2	"20040039919" and signature	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/30 17:03
S425	2	"20040039919" and signature and transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2016/06/30 17:06

			IBM_TDB			
S426	2	"20040039919" and "digital signature"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/30 17:10
S427	2	"20040039919" and ("card number")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/07/02 11:24
S428	41	(virtual same credit same credit) same (cvv or "credit verification value")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/07/02 11:29
S429	42	(virtual same credit same card) same (cvv or "credit verification value")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/07/02 11:29
S430	2	"20040039919" and digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/07/02 11:50
S431	11	"20040039919"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/07/02 11:54
S432	2	"20040230489"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/07/09 16:56
S433	267	"G06Q 20/341"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/09/01 08:47
S434	90	"G06Q 20/341" AND "CARD READER"	US-PGPUB; USPAT; USOCR; FPRS;	OR	OFF	2016/09/01 08:48

			EPO; JPO; DERWENT; IBM_TDB			
S435	12	"G06Q 20/341" AND "CARD READER" AND MICROPHONE	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/09/01 08:48
S436	2	"20150178719"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/10/04 16:06
S437	2856921	20150178719and engage	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/10/05 13:16
S438	2	"20150178719" and engage	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/10/05 13:17
S439	2	"20150178719" and engag$6	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/10/05 13:17
S440	2	"8983873".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/10/05 13:46
S441	2	"9137388".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/10/05 13:48
S442	1	"20150178719" and software	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/10/05 13:50
S443	1	"20150178719" and medium	US-PGPUB; USPAT;	OR	OFF	2016/10/05 13:50

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S444	0	(A/D or "analog to digital") same (smart near2 (phone or device)) same (convert or converting or conversion) same voltage same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/10 15:58
S445	0	(A/D or "analog to digital") same (smart near2 (phone or device)) same (convert or converting or conversion) same voltage and transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/10 15:59
S446	77	(A/D or "analog to digital") same (smart near2 (phone or device)) same (convert or converting or conversion)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/10 15:59
S447	35	(A/D or "analog to digital") same ((mobile near2 (phone or device)) or (tablet or computer or pda)) same (convert or converting or conversion) same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/10 16:06
S448	5	"20040058705"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/01/10 16:10
S449	84	(analog or digital) same ((mobile near2 (phone or device)) or (tablet or computer or pda)) same (convert or converting or conversion) same transaction same (mic or microphone or speaker)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/10 16:19
S450	49	(analog or digital) same ((mobile near2 (phone or device)) or (tablet or computer or pda)) same (convert or converting or conversion) same transaction same (mic or microphone or speaker) and reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/10 16:20
S451	9	(analog or digital) same ((mobile near2 (phone or device)) or (tablet or computer or pda)) same (convert or converting or conversion) same transaction same (mic or microphone or speaker) same reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/10 16:27

S452	521	((AUDIO OR MICROPHONE OR EARPHONE OR HEADSET) same (CONNECTOR OR JACK)) SAME PHONE SAME CARD SAME READER	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/10 16:29
S453	108	((AUDIO OR MICROPHONE OR EARPHONE OR HEADSET) same (CONNECTOR OR JACK)) SAME PHONE SAME CARD SAME READER same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/10 16:30
S454	28	((AUDIO OR MICROPHONE OR EARPHONE OR HEADSET) same (CONNECTOR OR JACK)) SAME PHONE SAME CARD SAME READER same transaction same (ADC or convert or conversion or "Analog to digital" or "A/D")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/10 16:30
S455	25	((AUDIO OR MICROPHONE OR EARPHONE OR HEADSET) same (CONNECTOR OR JACK)) SAME (mobile or wireless or portable) SAME CARD SAME READER same transaction same (ADC or convert or conversion or "Analog to digital" or "A/D")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/01/10 16:38
S456	4	"9016572".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/01/11 09:23
S457	2	"14636674"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/01/11 09:27
S458	14	"9003508".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/01/11 13:22
S459	0	WO2001061973	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/01/11 14:49
S460	0	"Accessory board with smart card reader for a portable radio telephone"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	OFF	2017/01/11 14:50

			DERWENT; IBM_TDB			
S461	4	"11/533030"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/01/11 16:06
S462	1	"20070067833" and "reader"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/01/11 16:08
S463	2	"14636674"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/01/11 17:48

EAST Search History (Interference)

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1/ 12/ 2017 1:37:40 PM
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Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14636674	COLNOT ET AL.
	Examiner	Art Unit
	MOHAMMAD Z SHAIKH	3694

CPC- SEARCHED		
Symbol	Date	Examiner
G06Q 20/3272	5/14/2015	/MZS/
G06Q 20/3278	5/14/2015	/MZS/
G06K19/07	9/15/2015	/MZS/
H04M2250/14	9/15/2015	/MZS/
G06Q20/34	9/15/2015	/MZS.
G06Q20/123	9/15/2015	/MZS/
G06Q20/341	9/15/2015	/MZS/
G06Q20/20 OR G06Q20/32 OR G06Q20/325 OR G06Q20/34 OR G07F7/0873 OR G07F7/0886	6/29/2016	/MZS/
G06Q20/32 OR G06Q20/3272 OR G06Q20/341 OR H04M2250/14	1/12/2017	/MZS/

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner

SEARCH NOTES		
Search Notes	Date	Examiner
EAST	5/14/2015	/MZS/
EAST	9/15/2015	/MZS/
EAST	6/29/2016	/MZS/
EAST	1/12/2017	/MZS/

INTERFERENCE SEARCH

	/MOHAMMAD Z SHAIKH/ Primary Examiner.Art Unit 3694

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

	/MOHAMMAD Z SHAIKH/ Primary Examiner.Art Unit 3694

PTO/SB/06 (09-11)
Approved for use through 1/31/2014. OMB 0651-0032
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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 14/636,674	Filing Date 03/03/2015	☐ To be Mailed

ENTITY: ☐ LARGE ☒ SMALL ☐ MICRO

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) 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), (i), 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 $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*		X $ =	
☐ 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

AMENDMENT	10/14/2016	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	* 4	Minus	** 20	= 0	X $40 =	0
	Independent (37 CFR 1.16(h))	* 2	Minus	***3	= 0	X $210 =	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		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	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	

* 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 number found in the appropriate box in column 1.

LIE
/DORIAN EVANS/

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.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Art Unit: 3694 Examiner: Shaikh, Mohammad Z

Confirmation No.: 3697

In Re:	Vincent Cedric Colnot et al.
Case:	P1987.02
Serial No.:	14/636,674
Filed:	March 3, 2015
Subject:	Methods and Apparatus for Enabling Secure Network-Based Transactions

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Response C

In the Claims

All of the claims standing for examination are reproduced below with appropriate status indication.

1. (Currently amended) An apparatus comprising:

a card reader having an input interface configured to accept transaction data from an output interface of a transaction card, and an output pin, as a part of the card reader, configured to ~~engage~~ directly connect the card reader in a microphone port of a smart telephone, the card reader providing data accepted from the output interface of the transaction card to the output pin, and hence to the microphone port, as an analog variable voltage audio signal; and

coded instructions stored in a non-transitory medium of a first Internet-connected server, and accessible by a user of the card reader;

wherein the coded instructions, when executed on a processor ~~provide functionality for executing~~ in ~~a~~ the smart telephone, convert the analog variable voltage audio signal on the microphone port to the transaction data as digital data, ~~deriving digital data from the data provided by the card reader to a microphone port of a smart telephone, establishing~~ establish direct data exchange between ~~a~~ the smart telephone and a second Internet-connected server ~~providing services to a financial institution, or an on-line merchant~~, and ~~facilitating~~ facilitate transactions by ~~an owner of a transaction card with the~~ a financial institution, or purchases ~~by the owner of the transaction card with~~ from an on-line merchant, using the transaction data.

2-7. (Cancelled)

8. (Currently amended) The apparatus of claim 1 wherein the coded instructions, when executed on a processor in the smart telephone, ~~further provide functionality to~~ retrieve a card verification code (CVV) ~~as a digital string~~ from the transaction data provided by the card reader, ~~to~~ and use the CVV in purchases or transactions ~~by the owner of the transaction card~~.

9. (Currently amended) A method comprising:

accepting transaction data from a transaction card at an input interface of a card reader having an output pin as a part of the card reader, the output pin directly connecting the card reader in a microphone port of a smart telephone;

receiving the transaction data in ~~a~~ the smart telephone as an analog variable voltage signal from ~~a~~ the microphone port of the smart telephone;

converting the transaction data as an analog variable voltage signal in the smart telephone to digital transaction data ~~by executing coded instructions from a non-transitory medium on a processor in the smart telephone~~;

establishing direct data exchange with an Internet-connected server providing services to a financial institution or an on-line merchant by executing coded instructions on a processor in the smart telephone; and

facilitating transactions ~~by an owner of a transaction card~~ with the financial institution or purchases ~~by the owner of the transaction card with an~~ from the on-line merchant, using the transaction data.

10-15. (Cancelled)

16. (Currently amended) The method of claim 9 wherein the coded instructions, when executed on a processor in the smart telephone, ~~operate to derive~~ retrieve a card verification code (CVV) from the transaction data received on the microphone port, and ~~to~~ use the CVV in the purchases or transactions.

17. (Cancelled)

REMARKS

This response is to the Office Action mailed on 07/14/2016.

From the Office

Claim Rejections- 35 U.S.C §112

Claim 1 is rejected under 35 U.S. C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention.

Claim 1 recites, in line 3: "an output pin configured ***to engage*** in a microphone port. It is unclear what engage means in this context, is it to 1) become involved or 2) interlock or connect together.

For examination purposes examiner will be using the second definition. Appropriate correction is required.

Claim 1 further recites, in line 12, "wherein the coded instructions provide functionality for executing in a smart telephone" It is unclear to examiner what is being "executed in the smart telephone"? Appropriate correction is required.

Claim Interpretation

Claim 1 further recites, in line 12, "wherein the coded instructions provide functionality for executing ***in a smart telephone"***

This recitation is directed to *intended use language* (please see MPEP 2111.04). This intended use langue does not impose any limit on the interpretation of the claim.

Applicant's response

Applicant herein amends claim 1 to recite an output pin, as a part of the card reader, configured to directly connect to a microphone port of a smart telephone. Additionally, claim 1 is herein amended to recite wherein the coded instructions execute in a smart telephone.

From the Office

Claim Rejections- 35 U.S.C § 101

Claims 9, 16-17 are rejected under 35 U.S.C 101.

Applicant's response

Applicant herein amends independent claim 9 to include a card reader having an input interface configured to accept data from an output interface of a transaction card, and an output pin, as a part of the card reader, configured to directly connect to a microphone port of a smart telephone, the card reader providing data accepted from the output interface of the transaction card to the output pin, thereby directing the claims to substantially more than a mere abstract idea.

Applicant's representatives and the Examiner conducted an interview on 10/05/2016, wherein the Examiner indicated that adding hardware elements included in claim 1 to claims 9 and 17 should serve to overcome the 101 rejection. Applicant respectfully requests the claim rejection under 35 U.S.C. § 101 be withdrawn.

Claim 17 has been cancelled.

From the Office

Claim Rejections- 35 U.S.C § 103

Claims 1, 9, and 17 stand rejected under 35 U.S.C 1 03(a) as being unpatentable over "Turning your mobile into a magnetic stripe reader", Deepquest, April 13, 2005, pgs 1-6, herein Deepquest, in view of US 2004/0230489 to Goldthwaite, et al, herein Goldthwaite.

Applicant's response

Applicant’s representatives were privileged to have an interview with the Examiner on 10/5/2016, in which interview various proposed claim amendments were suggested and discussed with agreement from the Examiner that said amendments may render a favorable response regarding allowability of the present claims being examined.

Therefore, applicant herein amends independent claims 1 and 9 along the lines of the interview discussion. Claim 1, as amended, is reproduced, below:

1. (Currently amended) An apparatus comprising:

a card reader having an input interface configured to accept transaction data from an output interface of a transaction card, and an output pin, as a part of the card reader, configured to directly connect the card reader in a microphone port of a smart telephone, the card reader providing data accepted from the output interface of the transaction card to the output pin, and hence to the microphone port, as an analog variable voltage audio signal; and

coded instructions stored in a non-transitory medium of a first Internet-connected server, and accessible by a user of the card reader;

wherein the coded instructions, when executed on a processor in the smart telephone, convert the analog variable voltage audio signal on the microphone port to the transaction data as digital data, establish direct data exchange between the smart telephone and a second Internet-connected server, and facilitate transactions by a financial institution, or purchases from an on-line merchant, using the transaction data.

Applicant's claim, as amended and presented above, now positively recites that the output pin is a part of the card reader, and is configured to directly connect to a microphone port of a smart telephone (pg. 11, ll. 8-14). Applicant points out that the art of Deepquest fails to teach this limitation. Deepquest suggests using a handsfree kit, or a wired connection is taught to microphone connection pins internal to the Siemens MC60. Applicant argues that the art of Deepquest is silent as to the conduit from the card reader to the output pin and from the output pin to the external microphone port. One with skill in the art understands that "handsfree", at the time of filing the present invention, was limited to a headset, i.e. earphones with an integrated microphone. Deepquest fails to specifically teach how "handsfree" is utilized to connect a card reader to an external microphone port of a smartphone. One with skill in the art may only grasp from the description of Deepquest that there may be a wired connection from the card reader to the

external headset/microphone input. Deepquest additionally suggests that the handsfree embodiment must openly play audible sound from a card reader that is captured by an integrated microphone and recorded as a sound file in the phone. Applicant believes this is a serious security problem that one with skill in the art would not consider.

The art of Goldthwaite teaches a plurality of means for connecting a card reader to a mobile phone, but fails to teach or suggest a card reader directly connecting to a microphone port, as claimed, (see [0033]).

Applicant herein amends claim 1 to recite that the coded instructions in the smart telephone converts (transforms) the analog variable voltage signal received from the card reader at the microphone port to the transaction data as digital data. Applicant points out to the Examiner that the transaction data captured by the card reader must be presented to the microphone port at the smart telephone as analog variable voltage audio signal (analog modulated signal) in order for the microphone to receive it. The coded instructions within the smart telephone must then convert the transaction data to digitized transaction data in order for the server to accept the transaction data enabling transactions.

The art of Deepquest includes a very limited teaching of ADC operating to digitize analog voice for the cellular network, or to record input at a microphone port as a WAV file in the MC60 in order to transfer the file to a computer, prior to the data being utilized to complete a transaction. Deepquest is silent as to an ability to send the data to an Internet connected server, as claimed.

The art of Goldthwaite teaches that the card reader presents the data as digitized data, and any transaction data uploaded to the smart telephone is done digitally via USB, etc. (see Goldthwaite Fig. 5 and [0033]). Applicant believes the fact that Goldthwaite discloses only means to receive and store data digitally actually teaches away from receiving and converting variable voltage analog audio signals at a microphone port, as claimed.

The Examiner relies upon the art of Goldthwaite to teach coded instructions stored in a non- transitory medium of a first Interconnected server, and accessible by a user of the card reader, establishing data exchange between a smart telephone and a

second Internet-connected server providing services to a financial institution or an on-line merchant, and facilitating transactions by an owner of a transaction card with the financial institution or purchases by the owner of the transaction card with an on-line merchant.

Applicant asserts that the art of Goldthwaite teaches stored digitized payment data on a smart telephone. When the user makes an online purchase with a merchant server, the merchant server pings a payment server to verify payment for the merchant server. The transaction server sends an SMS message to the phone requesting the stored transaction data and the user of the phone sends a reply SMS with the data, or not. If the user sends the data to the transaction server, the data may be verified and the merchant server may complete the purchase with the user.

Applicant herein amends independent claims 1 and 9 to implement the coded instructions to establish a direct connection from the smart telephone to the Internet-connected server. Applicant understands that SMS communication requires a Short Message service center (SMSC) which is a network element in the mobile telephone network. Its purpose is to store, forward, convert and deliver Short Message Service (SMS) messages. Therefore, a direct connection is *not* established, as newly claimed.

Applicant believes that the ability to receive transaction data at a microphone port of a smartphone as variable voltage analog audio and converting it to digitized transaction data capable of being transmitted on the Internet and utilized by a computerized server to perform a transaction was not known in the art at the time of filing the present invention. Applicant provides a new use for a smart telephone and therefore a new machine.

From the Office

Claims 8, 16 are being rejected under 35 U.S.C 1 03(a) as being unpatentable over Deepquest in view of Goldthwaite and further in view of US Patent 7,761,374 to Sahota et al, herein Sahota and further in view of US 2004/039919 to Takayama et al, herein Takayama.

Applicant's response

Dependent claims 8 and 16, as amended, recite that the coded instructions, when executed on a processor in the smart telephone, retrieve a card verification code (CVV) from the transaction data provided by the card reader, and use the CVV in purchases or transactions. The Examiner relies upon Sahota to disclose wherein the coded instructions provide functionality to retrieve a card verification code (CVV) (At least: Abstract; Figs: 3,6,7).

Applicant will first point out that the claim limitation of claims 8 and 16, as amended, recite:

The apparatus of claim 1 wherein the coded instructions, when executed on a processor in the smart telephone, retrieve a card verification code (CVV) from the transaction data provided by the card reader, and use the CVV in purchases or transactions. Applicant points out that this claim should not be interpreted in isolation as it depends directly from their respective independent claims which state the transaction data is received from a transaction card and the coded instruction *retrieves* the CVV from this data. Sahota teaches col. 6, ll. 40-48:

> *Once all nibbles in Block G have been twice examined as described, the three most-significant (i.e. leftmost) nibbles of the holding string are extracted 325. This 3-digit value is the dCVV for the transaction. Other numbers of bits may be extracted from the twice-examined nibble string to generate the dCVV for a transaction. Furthermore, different nibbles, such as the rightmost nibbles, may be used as the dCVV for a transaction. The three leftmost nibbles, however, represent a preferred embodiment.*

Applicant points out that the "nibbles" used to generate the dCVV in Sahota are not retrieved from the actual transaction card data, as claimed. Applicant argues this is an important point because, unless it is retrieved from the actual transaction data captured from the transaction card, the transaction server would not be able to verify the CVV to approve a purchase, as claimed. The data contained in nibbles is generated data and not

data directly retrieved from the actual transaction card (see Sahota col. 5, ll. 6-34). Sahota teaches that dCVV is created on the fly to enable a transaction and NOT *retrieved* from data captured from a transaction card, as claimed, but created/generated as a unique dCVV for each transaction.

Applicant believes claims 1 and 9, as amended are patentable over the art provided by the Examiner. Claims 8 and 16 are patentable, as amended and argued, above, or at least as depended upon a patentable claim.

Summary

As all of the claims, as amended and argued above, have been shown to be patentable over the art cited and applied, applicant respectfully requests reconsideration and that the case be passed quickly to issue.

If any fees are due beyond fees paid with this amendment, authorization is made to deduct those fees from deposit account 50-0534. If any time extension is needed beyond any extension requested with this amendment, such extension is hereby requested.

Respectfully Submitted,
Vincent Cedric Colnot et al.

By /Donald R. Boys/
Donald R. Boys
Reg. No. 35,074

Central Coast Patent Agency, Inc.
3 Hangar Way, Suite D
Watsonville, CA 95076
(831) 768-1755

Doc code: IDS
Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (01-10)
Approved for use through 07/31/2012. OMB 0651-0031
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	14636674
Filing Date	2015-03-03
First Named Inventor	Vincent Cedric Colnot
Art Unit	3694
Examiner Name	Mohammad Z Shaikh
Attorney Docket Number	3697

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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
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	14636674
	Filing Date	2015-03-03
	First Named Inventor	Vincent Cedric Colnot
	Art Unit	3694
	Examiner Name	Mohammad Z Shaikh
	Attorney Docket Number	3697

	1	VISDOMINE, LUIS PADILLA, Turning your mobile into a magnetic stripe reader, padilla@gae.ucm.es, My PGP public Key, http:/www.gae.ucm.es/~padilla/extrawork/mobilesoundtrack.html, August 30, 2004.

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EXAMINER SIGNATURE

Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	14636674
	Filing Date	2015-03-03
	First Named Inventor	Vincent Cedric Colnot
	Art Unit	3694
	Examiner Name	Mohammad Z Shaikh
	Attorney Docket Number	3697

CERTIFICATION STATEMENT

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	/Donald R. Boys/	Date (YYYY-MM-DD)	2016-10-14
Name/Print	Donald R. Boys	Registration Number	35074

This collection of information is required by 37 CFR 1.97 and 1.98. 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 1 hour 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.**

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 the Freedom of Information Act requires disclosure of these record s.

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 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.

Electronic Acknowledgement Receipt

EFS ID:	27219265
Application Number:	14636674
International Application Number:	
Confirmation Number:	3697
Title of Invention:	Methods and Apparatus for Enabling Secure Network-Based Transactions
First Named Inventor/Applicant Name:	Vincent Cedric Colnot
Customer Number:	24739
Filer:	Donald Rex Boys/Sheri Beasley
Filer Authorized By:	Donald Rex Boys
Attorney Docket Number:	P1987.02
Receipt Date:	14-OCT-2016
Filing Date:	03-MAR-2015
Time Stamp:	14:46:59
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Amendment/Req. Reconsideration-After Non-Final Reject	1987_02oar4.pdf	39926 cd45eb95025d104c97a335e29044acbd89e230b1	no	10

Warnings:

Information:					
2	Information Disclosure Statement (IDS) Form (SB08)	updated_IDS.pdf	612028 4d1636c3b9e03d1dde02f4c9194e6aa4d4cc2bf5	no	4
Warnings:					
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A U.S. Patent Number Citation or a U.S. Publication Number Citation is required in the Information Disclosure Statement (IDS) form for autoloading of data into USPTO systems. You may remove the form to add the required data in order to correct the Informational Message if you are citing U.S. References. If you chose not to include U.S. References, the image of the form will be processed and be made available within the Image File Wrapper (IFW) system. However, no data will be extracted from this form. Any additional data such as Foreign Patent Documents or Non Patent Literature will be manually reviewed and keyed into USPTO systems.					
3	Non Patent Literature	Padilla_83004.pdf	23280 b357fa4fb4f3e7af1b7453290d5682d96a6ca157	no	4
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		Total Files Size (in bytes):	675234		

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.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/636,674	03/03/2015	Vincent Cedric Colnot	P1987.02	3697

24739 7590 10/13/2016

CENTRAL COAST PATENT AGENCY, INC
3 HANGAR WAY SUITE D
WATSONVILLE, CA 95076

EXAMINER
SHAIKH, MOHAMMAD Z

ART UNIT	PAPER NUMBER
3694	

NOTIFICATION DATE	DELIVERY MODE
10/13/2016	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):

officeactions@CENTRALCOASTPATENT.COM
plambuth@centralcoastpatent.com

Applicant-Initiated Interview Summary	Application No.	Applicant(s)	
	14/636,674	COLNOT ET AL.	
	Examiner	Art Unit	
	MOHAMMAD Z. SHAIKH	3694	

All participants (applicant, applicant's representative, PTO personnel):

(1) *MOHAMMAD Z. SHAIKH*. (3) *CYNTHIA S. LAMON*.

(2) *DONALD BOYS*. (4)_____.

Date of Interview: *05 October 2016*.

Type: ☒ Telephonic ☐ Video Conference
☐ Personal [copy given to: ☐ applicant ☐ applicant's representative]

Exhibit shown or demonstration conducted: ☐ Yes ☒ No.
If Yes, brief description: _____.

Issues Discussed ☒101 ☐112 ☐102 ☒103 ☐Others
(For each of the checked box(es) above, please describe below the issue and detailed description of the discussion)

Claim(s) discussed: *1,9 and 17*.

Identification of prior art discussed: *Deepquest (NPL) reference and Goldthwaite*.

Substance of Interview
(For each issue discussed, provide a detailed description and indicate if agreement was reached. Some topics may include: identification or clarification of a reference or a portion thereof, claim interpretation, proposed amendments, arguments of any applied references etc...)

Examiner maintained position that claims 9,17 are directed towards an abstract idea (a fundamental economic practice) of conducting an online purchase with a smart phone. Examiner maintained position that Deepquest alongwith Goldthwaite is disclosing the limitations of claim 1,9,17 as claimed. Attorney proposed claim amendments to further define the invention over Deepquest and Goldthwaite. .

Applicant recordation instructions: The formal written reply to the last Office action must include the substance of the interview. (See MPEP section 713.04). If a reply to the last Office action has already been filed, applicant is given a non-extendable period of the longer of one month or thirty days from this interview date, or the mailing date of this interview summary form, whichever is later, to file a statement of the substance of the interview

Examiner recordation instructions: Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

☐ Attachment

/MOHAMMAD Z SHAIKH/ Primary Examiner, Art Unit 3694	

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record
A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews
Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.
All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

———

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:
- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:
1) A brief description of the nature of any exhibit shown or any demonstration conducted,
2) an identification of the claims discussed,
3) an identification of the specific prior art discussed,
4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
5) a brief identification of the general thrust of the principal arguments presented to the examiner,
   (The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
6) a general indication of any other pertinent matters discussed, and
7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

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UNITED STATES DEPARTMENT OF COMMERCE
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/636,674	03/03/2015	Vincent Cedric Colnot	P1987.02	3697

24739 7590 07/14/2016

CENTRAL COAST PATENT AGENCY, INC
3 HANGAR WAY SUITE D
WATSONVILLE, CA 95076

EXAMINER
SHAIKH, MOHAMMAD Z

ART UNIT	PAPER NUMBER
3694	

NOTIFICATION DATE	DELIVERY MODE
07/14/2016	ELECTRONIC

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Office Action Summary	Application No. 14/636,674	Applicant(s) COLNOT ET AL.	
	Examiner MOHAMMAD Z. SHAIKH	Art Unit 3694	AIA (First Inventor to File) Status No

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

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12/7/15*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ 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.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5)☒ Claim(s) *1,8,9,16 and 17* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1,8,9,16 and 17* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, 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.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ 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)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date _____.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

DETAILED ACTION

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

Introduction

2. The following is a NON-FINAL Office Action in response to the communication received on 12/07/15. Claims 1, 8-9, 16-17 are now pending in this application.

3. A request for continued examination **(RCE)** 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 12/07/15 has been entered.

Response to Amendments

4. Applicants Amendment has been acknowledged in that: Claims 1, 8, 16-17 have been amended; Claim 17 is new; hence such, Claims 1, 8-9, 16-17 are now pending in this application.

RESPONSE TO ARGUMENTS

Applicant argues #1

Accordingly the applicant has again amended the claims, bearing in mind all of the cited references and the newly provided reference Steenstra, which has yet to be formally

cited or applied. Claim 1 as now standing positively recites a card reader and coded instructions available to a user of the card reader. A smart telephone is not positively recited, although the coded instructions are recited as executable in a smart telephone and as providing certain functions in a smart telephone.

It is applicant's belief that the Steenstra reference seems to support that digital data may be recovered from an analog data stream, but the more narrow circumstances of recovering a digital string from an analog stream on a microphone port of a smart telephone, that analog string representing data from a transaction card, is not taught or suggested by Steenstra. Further, Colnot was applied with reference to the personal computer aspects, not the smart telephone, and applicant is quite sure that coded instructions executing in smart telephones were not extracting digital strings from analog input on a microphone port, and certainly not providing data communication with Internet-connected servers and facilitating transactions at a financial institution or purchase by an owner of a transaction card. Applicant believes these limitations in combination and in interaction to one another are not taught or suggested in the art thus far cited and applied, including Steenstra, and provide that claim 1 as amended is patentable to applicant over the art cited and applied taken either alone or in combination.

Examiner Response

This argument is moot since a new reference is being used, (please see the 103 rejection that follows).

Applicant argues #2

The applicant believes, as in the case of claim 1 discussed above, that the functionality of the coded instructions positively claimed, operating in a smart telephone, is not taught in any of the cited art, including that of Steenstra, and that claim 9 is thus patentable to applicant over the art thus far cited, including the teaching of Steenstra.

Examiner Response

This argument is moot since a new reference is being used, (please see the 103 rejection that follows).

Applicant argues #3

Claim 16 is thus patentable at least as depended from patentable claim.

Examiner Response

This argument is moot since a new reference is being used, (please see the 103 rejection that follows).

Claim Rejections- 35 U.S.C § 112

5. The following is a quotation of 35 U.S.C. 112(b):

> (b) CONCLUSION.—The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor or a joint inventor regards as the invention.

The following is a quotation of 35 U.S.C. 112 (pre-AIA), second paragraph:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 1 is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention.

Claim 1 recites, in line 3: “an output pin configured ***to engage*** in a microphone port.

It is unclear what engage means in this context, is it to 1) become involved or 2) interlock or connect together.

For examination purposes examiner will be using the second definition.

Appropriate correction is required.

Claim 1 further recites, in line 12, “wherein the coded instructions provide functionality for executing in a smart telephone”

It is unclear to examiner what is being “executed in the smart telephone”?

Appropriate correction is required.

Claim Interpretation

Claim 1 further recites, in line 12, “wherein the coded instructions provide functionality for executing ***in a smart telephone***”

This recitation is directed to *intended use language* (please see MPEP 2111.04). This intended use langue does not impose any limit on the interpretation of the claim.

Claim Rejections- 35 U.S.C § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. **Claims 9, 16-17 are rejected under 35 U.S.C 101.**

The claimed invention is directed to a judicial exception (i.e, a law of nature, a natural phenomenon, or an abstract idea) without significantly more.

The rationale for this determination is explained below:

In this case, the claims are directed to the abstract idea **of purchasing goods or services using a smart phone,** a fundamental economic practice.

The claims do not include additional elements that are sufficient to amount to significantly more than the judicial exception. Accordingly, these claims are patent ineligible.

6. The claimed invention is not directed to patent eligible subject matter. Based upon consideration of all of the relevant factors with respect to the claim as a whole, claim(s) 9, 16-17 are determined to be directed to an abstract idea. In its recent decision, *Alice Corporation Pty. Ltd. v. CLS Bank International, et al. {'Alice Corp."),* the Supreme Court made clear that it applies the framework set forth in *Mayo Collaborative*

Services v. Prometheus Laboratories, Inc., 566 U.S._(2012) *{Mayo),* to analyze claims directed towards laws of nature and abstract ideas. *Alice Corp.* also establishes that the same analysis applies for all categories of claims *{e.g.,* product and process claims).

The basic inquiries to determine subject matter eligibility remain the same as explained in MPEP 2106(1). First, determine whether the claim is directed to one of the four statutory categories of invention, *i.e.,* process, machine, manufacture, or composition of matter. Next, determine if the claim is directed towards a judicial exception *(i.e.,* law of nature, natural phenomenon, and abstract idea). The two part test provided in *Alice Corp.* to determine whether a claim directed towards an abstract idea is statutory under §101 requires an evaluation to determine 1) whether the claims is directed to an abstract idea and 2) if an abstract idea is present in the claim, whether the claim amounts to **significantly more** than the abstract idea itself. Examples of abstract ideas reference in *Alice Corp.* include:

- **Fundamental economic principles**
- Certain methods of organizing human activities
- An idea of itself
- Mathematical relationships/formulas.

Limitations reference in *Alice Corp.* that may be enough to qualify as "significantly more" **when recited in a claim with an abstract idea** include, as non-exclusive examples:

- Improvements to another technology or technical field

- Improvements to the functioning of the computer itself

- Meaningful limitations beyond generally linking the use of an abstract idea to a particular technological environment.

Examples that are not enough to qualify as "significantly more" **when recited in a claim with an abstract idea** include, as non-limiting or non-exclusive examples:

- Adding the words "apply it" (or an equivalent) with an abstract idea, or mere instructions to implement an abstract idea on a computer

- Requiring no more than a generic computer to perform generic computer functions that are well-understood, routine and conventional activities previously known to the industry.

Claim 9 recites:

receiving data in a smart telephone from a microphone port of the smart telephone;

converting the data to digital data by executing coded instructions from a non-transitory medium on a processor in the smart telephone; and

establishing data exchange with an Internet-connected server providing services to a financial institution or an on-line merchant; and

facilitating transactions by an owner of a transaction card with the financial institution or purchases by the owner of the transaction card with an on-line merchant.

These steps describe the concepts **of purchasing goods or services using a smart phone** (the identified abstract idea) using a mobile device (smart telephone).

These steps correspond to concepts identified by courts.

As such they are directed to a fundamental economic practices, which the courts have been deemed to be an abstract idea.

Applicant is further directed to *US Patent 7,096,003* to Jao eat al, herein Jao, which was declared patent ineligible by the Federal Circuit, Oct 13, 2015 for being directed to an abstract idea.

The claims in Jao were directed to an apparatus and a method for conducting banking transactions with a mobile phone (smart phone), (See claims 1, 2, 6 of Jao).

The claims of the instant invention, like the claims in Jao also allow a user to conduct a transaction with a banking (financial institution) using a mobile phone (smart phone).

The concept described in claim 9 is not meaningfully different than those economic concepts found by the courts to be abstract ideas.

The claims recite the additional elements of a smart telephone comprising a microphone.

The additional elements, taken individually and as combination, do not result in the claim amounting to significantly more than the abstract because the computing system is recited at a high level of generality and are recited as performing generic

computer functions routinely used in computer applications. Generic computer components recited as performing generic computer functions that are well-understood routine and conventional activities amount to no more than implementing the abstract idea with a computerized system.

Thus taken alone, the additional elements do not amount to significantly more than a judicial exception. Looking at the claims as an ordered combination adds nothing that is not already present when looking at the claims individually. There is no indication that the combination of elements improves the functioning of the computer or improves any other technology. Their collective functions merely provide conventional computer implementation.

In reference to claim 16, these dependent claims have also been reviewed with the same analysis as independent claim 9. The dependent claim(s) have been examined individually and in combination with the preceding claims, however they do not cure the deficiencies of claim 16. If applicant believes the dependent claims (9) are directed towards patent eligible subject matter, they are invited to point out the specific limitations in the claim that are directed towards patent eligible subject matter.

Claim 17 recites:

A smart telephone, comprising:

a microphone port receiving data; and

coded instructions executing on a processor of the smart telephone from a non- transitory medium; whein the coded instructions provide functions for retrieving digital data from the data

received on the microphone port, establishing data exchange with an Internet- connected server providing services to a financial institution or an on-line merchant, and facilitating transactions by an owner of a transaction card with the financial institution or purchases by the owner of the transaction card with an on-line merchant.

These steps describe the concepts **of purchasing goods or services using a smart phone** (the identified abstract idea) using a mobile device.

These steps correspond to concepts identified by courts.

As such they are directed to a fundamental economic practice, which the courts have been deemed to be an abstract idea. .

Applicant is further directed to *US Patent 7,096,003* to Jao eat al, herein Jao, which was declared patent ineligible by the Federal Circuit, Oct 13, 2015 for being directed to an abstract idea.

The claims in Jao were directed to an apparatus and a method for conducting banking transactions with a mobile phone (smart phone), (See claims 1, 2, 6 of Jao).

The claims of the instant invention, like the claims in Jao also allow a user to conduct a transaction with a banking (financial institution) using a mobile phone (smart telephone).

The concept described in claim 17 is not meaningfully different than those economic concepts found by the courts to be abstract ideas.

The claims recite the additional elements of a smart telephone comprising a microphone.

The additional elements, taken individually and as combination, do not result in the claim amounting to significantly more than the abstract because the computing

system is recited at a high level of generality and are recited as performing generic computer functions routinely used in computer applications. Generic computer components recited as performing generic computer functions that are well-understood routine and conventional activities amount to no more than implementing the abstract idea with a computerized system.

Thus taken alone, the additional elements do not amount to significantly more than a judicial exception. Looking at the claims as an ordered combination adds nothing that is not already present when looking at the claims individually. There is no indication that the combination of elements improves the functioning of the computer or improves any other technology. Their collective functions merely provide conventional computer implementation.

Claim 17 is also rejected under 35 U.S.C 101 under preemption.

Claim 17 recites, “A smart telephone comprising: a microphone port, a processor.."

Virtually all smart telephones comprise a microphone and a processor.

Applicant would be preempting all smart phones.

The concern over preemption was expressed as early as 1852. See *Le Roy v. Tatham,* 55 U.S. 156, 175 (1852) ("A principle, in the abstract, is a fundamental truth; an original cause; a motive; these cannot be patented, as no one can claim in either of them an exclusive right.").

("upholding the patent 'would pre-empt use of this approach in all fields, and would effectively grant a monopoly over an abstract idea'"). The courts have held that a claim may not preempt abstract ideas, laws of nature, or natural phenomena, i.e., one may not patent every "substantial practical application" of an abstract idea, law of nature, or natural phenomenon. This is because such a patent would "in practical effect be a patent on the [abstract idea, law of nature or natural phenomenon] itself." *Gottschalk v. Benson,* 409 U.S. 63, 71, 72, 175 USPQ 673, 676 (1972).

Claim Rejections- 35 U.S.C § 103

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

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1, 9, 17 are being rejected under 35 U.S.C 103(a) as being unpatentable over "Turning your mobile into a magnetic stripe reader", Deepquest, April 13, 2005, pgs 1-6, herein Deepquest in view of US 2004/0230489 to Goldthwaite, et al, herein Goldthwaite.

Regarding claim 1, Deepquest discloses:

An apparatus comprising:

a card reader having an input interface configured to accept data from an output interface of a transaction card, and an output pin configured to engage in a microphone port of a smart telephone, the card reader providing data accepted from the output interface of the transaction card to the output pin *(At least: page 1: paragraph 2; page 2: paragraph starting with "Hardware")*;

wherein the coded instructions provide functionality for executing in a smart telephone, deriving digital data from the data provided by the card reader to a microphone port of a smart telephone (*At least: page 1: paragraph 2; page 2: paragraph starting with "Hardware")*

However Deepquest does not disclose coded instructions stored in a non-transitory medium of a first Interconnected server, and accessible by a user of the card reader, establishing data exchange between a smart telephone and a second Internet-connected server providing services to a financial institution or an on-line merchant, and facilitating transactions by an owner of a transaction card with the financial institution or purchases by the owner of the transaction card with an on-line merchant.

Goldhwaite discloses coded instructions stored in a non-transitory medium of a first Interconnected server, and accessible by a user of the card reader (At least: [0021]), establishing data exchange between a smart telephone and a second Internet-connected server providing services to a financial institution or an on-line merchant(At least: Fig 1) , and facilitating

transactions by an owner of a transaction card with the financial institution or purchases by the owner of the transaction card with an on-line merchant (At least: Fig 1; [0017], [0024],[0025]).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Deepquest's invention to include coded instructions stored in a non-transitory medium of a first Interconnected server, and accessible by a user of the card reader, establishing data exchange between a smart telephone and a second Internet-connected server providing services to a financial institution or an on-line merchant, and facilitating transactions by an owner of a transaction card with the financial institution or purchases by the owner of the transaction card with an on-line merchant.

One of ordinary skill in the art would have been motivated to include coded instructions stored in a non-transitory medium of a first Interconnected server, and accessible by a user of the card reader, establishing data exchange between a smart telephone and a second Internet-connected server providing services to a financial institution or an on-line merchant, and facilitating transactions by an owner of a transaction card with the financial institution or purchases by the owner of the transaction card with an on-line merchant in order to ensure that the financial transaction is completed with minimum cost (Goldthwaite: [0009]).

Regarding claim 9, Deepquest discloses:

A method comprising:

receiving data in a smart telephone from a microphone port of the smart telephone (*At least: page 1: paragraph 2; page 2: paragraph starting with "Hardware")*

;

converting the data to digital data by executing coded instructions from a non-transitory medium on a processor in the smart telephone (At least: page 1: First paragraph: "Exploring my new Siemens MC60..... This suggests that the MC60 has a built in ADC ... during communication).

However Deepquest does not disclose establishing data exchange with an Internet-connected server providing services to a financial institution or an on-line merchant; and facilitating transactions by an owner of a transaction card with the financial institution or purchases by the owner of the transaction card with an on-line merchant.

Goldhwaite discloses establishing data exchange with an Internet-connected server providing services to a financial institution or an on-line merchant (At least: Fig 1); and facilitating transactions by an owner of a transaction card with the financial institution or purchases by the owner of the transaction card with an on-line merchant. (At least: Fig 1; [0017], [0024],[0025]).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Deepquest's invention to include establishing data exchange with an Internet-connected server providing services to a financial institution or an on-line merchant; and facilitating transactions by an owner of a transaction card with the financial institution or purchases by the owner of the transaction card with an on-line merchant.

One of ordinary skill in the art would have been motivated to include establishing data exchange with an Internet-connected server providing services to a financial institution or an on-line merchant; and facilitating transactions by an owner of a transaction card with the financial

institution or purchases by the owner of the transaction card with an on-line merchant in order to ensure that the financial transaction is completed with minimum cost (Goldthwaite: [0009]).

Regarding claim 17, Deepquest discloses:

A smart telephone, comprising: a microphone port receiving data (At least: *t least: page 1: paragraph 2; page 2: paragraph starting with "Hardware")*; and
coded instructions executing on a processor of the smart telephone from a non- transitory medium; wherein the coded instructions provide functions for retrieving digital data from the data received on the microphone port (*At least: page 1: paragraph 2; page 2: paragraph starting with "Hardware").*

However Deepquest does not disclose establishing data exchange with an Internet- connected server providing services to a financial institution or an on-line merchant, and facilitating transactions by an owner of a transaction card with the financial institution or purchases by the owner of the transaction card with an on-line merchant.

Goldhwaite discloses establishing data exchange between a smart telephone and a second Internet-connected server providing services to a financial institution or an on-line merchant(At least: Fig 1) , and facilitating transactions by an owner of a transaction card with the financial institution or purchases by the owner of the transaction card with an on-line merchant (At least: Fig 1; [0017], [0024],[0025]).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Deepquest's invention to include establishing data exchange with an Internet- connected server providing services to a financial institution or an on-line merchant,

and facilitating transactions by an owner of a transaction card with the financial institution or purchases by the owner of the transaction card with an on-line merchant.

One of ordinary skill in the art would have been motivated to include establishing data exchange with an Internet- connected server providing services to a financial institution or an on-line merchant, and facilitating transactions by an owner of a transaction card with the financial institution or purchases by the owner of the transaction card with an on-line merchant in order to ensure that the financial transaction is completed with minimum cost (Goldthwaite: [0009]).

8. Claims 8,16 are being rejected under 35 U.S.C 103(a) as being unpatentable over Deepquest in view of Goldthwaite and further in view of US Patent 7,761,374 to Sahota et al, herein Sahota and further in view of US 2004/039919 to Takayama et al, herein Takayama.

Regarding claim 8, Deepquest discloses the apparatus of claim 1. Deepquest does not disclose, however Sahota discloses wherein the coded instructions provide functionality to retrieve a card verification code (CVV) (At least: Abstract; Figs: 3,6,7).

Sahota does not specifically disclose the card verification code (CVV) as a digital string from the data provided from the card reader, to use the CVV in the purchases or transactions by the owner of the transaction card.

Takayama discloses the card verification code (CVV) as a digital string from the data provided from the card reader, to use the CVV in the purchases or transactions by the

owner of the transaction card (At least: Abstract; [0061], [0137],[0141],[0167],[0168]; Fig 8).

[0061] The first information may be virtually any information. **Examples of the first information include random numbers, credit card numbers**, telephone numbers, IP addresses, or even coded biological authentication information such as user's finger prints or user's iris code information etc. "The second information" corresponds to information to determine whether the relationship of itself and the first information is a predetermined relationship. For example, the second information may be information to determine whether it is the same as the first information**. Moreover, when the first information and the second information are expressed in a binary form, it may be information to determine whether the difference of the first information and the second information indicates predetermined differences.**

[0062] Note that, in the present invention, encrypted first information and the second information are assumed to be expressed as a digital signal. Therefore, the authentication request apparatus and the authentication apparatus in the present invention can be implemented by a digital computer**. Examples of digital computers include movable devices such as a mobile phone,** PDA (Personal Digital Assistant), etc. FIG. 33 shows examples of combinations of (1) encrypted first information, (2) the second information, and (3) conditions for determining whether the first information and the second information have a predetermined relationship.

[0137] The data structure of encrypted electronic credit 300 is shown in FIG. 3. Electronic credit which is an electronic credit before being encrypted comprises electronic credit information 301 indicating credit card number, expiration date, user's name, and credit card issuer etc.; digital signature 302 corresponding to electronic credit information 301, and value authentication information F(VPW) 303.

[0141] Credit card transaction terminal 3 extracts value authentication information F(VPW) from decrypted electronic credit (ev), calculates the hash function Hash(F(VPW).parallel.R) **concatenated to random number R, and verifies Hash(F(VPW').parallel.R) received from mobile phone 1.** When they are identical, the user is authenticated as the rightful owner of the electronic credit (211). When they are not identical, an error message is displayed. Moreover, credit card transaction terminal 3 verifies digital signature 302 (212), and when an error is detected, an error message to the user is displayed. When an error has not been detected in verification of digital signature 302 (212), credit card transaction terminal 3 transmits the result of the verification to mobile phone 1 (213), then further transmits authorization request of credit card transaction to center 2 (215). **Center 2 processes authorization (216) and transmits a**

response of authorization request to credit card transaction terminal 3 (217), so that the credit card transaction in credit card transaction terminal 3 is completed. However, mobile phone 1, which received the authentication result, displays a message of completion of the credit card transaction process of electronic credit (214) and terminates credit card transaction process of electronic credit. Also in this case, password input by user is deleted when the Java.TM. application for the credit card transaction is terminated.

Therefore it would be obvious to substitute the "CVV" of Sahota with the "**electronic credit information 301"** (Takayama uses a digital or binary representation of the credit information) and to include it in Deepquest's invention. One of ordinary skill in the art would have been motivated to make these modifications to Deeqpuest in order to ensure that the security of the financial transactions with an online merchant is not compromised.

Claim 16 is being rejected using the same rationale as claim 8.

CONCLUSION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MOHAMMAD Z. SHAIKH whose telephone number is (571)270-3444. The examiner can normally be reached on Monday-Thursday (9:00-5:30).

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

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.

/MOHAMMAD Z SHAIKH/
Primary Examiner, Art Unit 3694

7/9/2016

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Notice of References Cited	Application/Control No. 14/636,674	Applicant(s)/Patent Under Reexamination COLNOT ET AL.	
	Examiner MOHAMMAD Z. SHAIKH	Art Unit 3694	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-7,810,729 B2	10-2010	Morley, Jr.; Robert E.		235/435
*	B	US-5,754,655 A	05-1998	Hughes; Thomas S.	G06Q20/04	235/380
*	C	US-5,388,148 A	02-1995	Seiderman; Abe	G06Q20/04	379/114.19
*	D	US-2004/0039919 A1	02-2004	Takayama, Hisashi	G06Q20/04	713/180
*	E	US-2004/0230489 A1	11-2004	Goldthwaite, Scott	G06K7/0004	705/26.1
	F	US-				
	G	US-				
	H	US-				
	I	US-				
	J	US-				
	K	US-				
	L	US-				
	M	US-				

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	"Turning your mobile into a magnetic stripe reader", Deepquest, April 13, 2005, pgs 1-6.
	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.

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L2	2	"20040039919" and ("card number")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/07/02 11:24
L3	41	(virtual same credit same credit) same (cvv or "credit verification value")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/07/02 11:29
L4	42	(virtual same credit same card) same (cvv or "credit verification value")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/07/02 11:29
L5	2	"20040039919" and digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/07/02 11:50
L6	11	"20040039919"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/07/02 11:54
S1	77	card same reader same (audio or sound or mic or microphone) same credit same analog same digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/05 13:53
S2	89	card same reader same (audio or sound or mic or microphone) same credit same analog same digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 13:53
S3	0	card same reader same (audio or	US-PGPUB;	OR	ON	2015/05/05

		sound or mic or microphone) same credit same analog same digital same (cvv or "credit verification value")	USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			13:53
S4	0	card same reader same (audio or sound or mic or microphone) same credit same analog same digital and (cvv or "credit verification value")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 13:53
S5	581	"l89" and (cvv or "credit verification value" or "security code" or code or pin or alias)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/05 13:54
S6	78	S2 and (cvv or "credit verification value" or "security code" or code or pin or alias)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/05 13:54
S7	1	"sound pass" same credit same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/05 14:00
S8	5	ohva and microphone	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/05 14:01
S9	34	("2004/0093496").URPN.	USPAT	OR	OFF	2015/05/05 14:03
S10	34	S9 and transaction and card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/05 14:03
S11	6607	(sound near2 card) same (mic or microphone or speaker) same (transaction or smart or debit or card or "stored value" or atm) same card same (reader or scanner or scan or read or reading)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:13
S12	1027	(sound near2 card) same (mic or microphone or speaker) same (transaction or smart or debit or card or "stored value" or atm) same card	US-PGPUB; USPAT; USOCR; FPRS;	OR	ON	2015/05/05 14:13

		same (reader or scanner or scan or read or reading) same analog same digital	EPO; JPO; DERWENT; IBM_TDB			
S13	63	(sound near2 card) same (mic or microphone or speaker) same (transaction or smart or debit or card or "stored value" or atm) same card same (reader or scanner or scan or read or reading) same analog same digital same signal	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:13
S14	2	(sound near2 card) same (mic or microphone or speaker) same ((transaction or smart or debit or card or "stored value" or atm) near2 card) same (reader or scanner or scan or read or reading) same analog same digital same signal	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:18
S15	405	(sound near2 card) same (mic or microphone or speaker) same ((transaction or smart or debit or card or "stored value" or atm) near2 card) same (reader or scanner or scan or read or reading) same analog same digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:19
S16	1	(sound near2 card) same (mic or microphone or speaker) same ((transaction or smart or debit or "stored value" or atm) near2 card) same (reader or scanner or scan or read or reading) same analog same digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:19
S17	2	(sound near2 card) same (mic or microphone or speaker) same ((transaction or smart or debit or "stored value" or atm) near2 card) same (reader or scanner or scan or read or reading) same converter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:19
S18	34	(computer or pda or table or phone or pda or device) same (mic or microphone or speaker) same ((transaction or smart or debit or "stored value" or atm) near2 card) same (reader or scanner or scan or read or reading) same converter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:21
S19	81	(computer or pda or table or phone or pda or device) same (mic or microphone or speaker) same (transaction or smart or debit or "stored value" or atm) same card same (reader or scanner or scan or read or reading) same converter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:23
S20	144	"Mag Tek"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/05 14:27
S21	1	S20 and (mic or microphone or speaker) same (transaction or smart	US-PGPUB; USPAT;	OR	ON	2015/05/05 14:28

		or debit or "stored value" or atm) same card same (reader or scanner or scan or read or reading) same converter	USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S22	1	S20 and (mic or microphone or speaker) same (transaction or smart or debit or "stored value" or atm) same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:28
S23	1	S20 and (mic or microphone or speaker) same (transaction or smart or debit or "stored value" or atm)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:28
S24	1	S20 and ((mic or microphone or speaker) same (transaction or smart or debit or "stored value" or atm))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:29
S25	678	audio same jack same card same reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/05 14:30
S26	205	audio same jack same card same reader same (financial or debit or transaction or credit or atm)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/05 14:31
S27	3	audio same jack same card same reader same (financial or debit or transaction or credit or atm) same converter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:31
S28	231	audio same jack same card same reader same (financial or debit or transaction or credit or atm)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:31
S29	20	audio same jack same card same reader same (financial or debit or transaction or credit or atm) same pin	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:31

S30	7	S29 AND ((G06Q20/3272 OR G06Q20/3278).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:38
S31	4	"20040093496"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/05 14:38
S32	3	"6708892".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 16:54
S33	1	"6708892".pn. and network	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 16:55
S34	0	"6708892".pn. and sequence	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 16:57
S35	0	"6708892".pn. and chip	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 16:57
S36	95	electronic same chip same digital same memory same amount same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 16:58
S37	28	electronic same chip same digital same memory same amount same card same (credit or debit or atm)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 16:59
S38	2	"6641050".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	OFF	2015/05/12 17:14

			DERWENT; IBM_TDB			
S39	1	"6641050".pn. and bit	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 17:14
S40	179	("6641050").URPN.	USPAT	OR	OFF	2015/05/12 17:16
S41	25	S40 and memory and chip and bit and card and (value or money)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 17:19
S42	20	electronic same chip same digital same memory same amount same card same analog same digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 17:21
S43	0	card near2 chip same credit same bit same analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 17:23
S44	0	card near7 chip same credit same bit same analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 17:23
S45	2	card same chip same credit same bit same analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 17:23
S46	255	card same chip same credit same bit	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 17:24
S47	76	card same chip same credit same bit same value	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 17:24

S48	28	card same chip same credit same bit same value same (conversion or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 17:24
S49	9	card same integrated same circuit same credit same bit same value same (conversion or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 17:25
S50	16	integrated same circuit same credit same bit same value same (conversion or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 17:30
S51	8	"integrated circuit" same credit same card same digital same converter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 17:34
S52	164	("5920628").URPN.	USPAT	OR	OFF	2015/05/12 17:39
S53	1	"7761374".pn. and (integrated or chip)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 17:45
S54	4	"5546462".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 17:47
S55	3	"6708892".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 17:49
S56	1	"6708892".pn. and (integrated or circuit or chip)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 17:50
S57	1	"7761374".pn. and (digital or analog)	US-PGPUB; USPAT; USOCR;	OR	OFF	2015/05/12 17:50

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S58	1	"6708892".pn. and (integrated or circuit or chip)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 17:52
S59	2	"6708892".pn. and smart	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 17:53
S60	4	"6607136".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 08:54
S61	2	"7334735".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 09:02
S62	1	"7334735".pn. and (card and converter)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 09:03
S63	1	"7334735".pn. and (card and digital and (convert or converting or converter)) and analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 09:06
S64	1	"7334735".pn. and (digital and (convert or converting or converter)) and analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 09:06
S65	1	"6708892".pn. and (digital and (convert or converting or converter)) and analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 09:08
S66	163	(digital near2 analog) same converter	US-PGPUB;	OR	OFF	2015/05/13

		same (credit or transaction or atm or debit) same card	USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			09:16
S67	292	(digital near2 analog) same converter same (credit or transaction or atm or debit) same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 09:16
S68	79	(digital near2 analog) same converter same (credit or transaction or atm or debit) same card same (sound or audio or mic or microphone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 09:17
S69	42	(digital near2 analog) same converter same ((credit or transaction or atm or debit) near3 card) same (sound or audio or mic or microphone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 09:20
S71	2	"7620759".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 09:37
S72	2	"6481623".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 09:40
S73	2	"6481623".pn. and (mic or microphone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 09:48
S74	3	"6708892".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 09:50
S75	1	"6708892".pn. and reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	OFF	2015/05/13 09:51

			IBM_TDB			
S76	1	"6708892".pn. and reader and (mic or microphone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 10:32
S77	1	"6607136".pn. and (mic or microphone) and computer and analog and signal and (convert or converting or converter)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 10:39
S78	1	"6607136".pn. and (mic or microphone) and computer and analog and signal and (convert or converting or converter) and reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 10:44
S79	1	"7334735".pn. and (mic or microphone) and computer and analog and signal and (convert or converting or converter) and reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 10:46
S80	15	("6708892").URPN.	USPAT	OR	OFF	2015/05/13 10:58
S81	5	"7118027".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:06
S82	2	"5763862".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:07
S83	2	"6481623".pn. and (mic or microphone) and reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:08
S84	117	("6481623").URPN.	USPAT	OR	OFF	2015/05/13 11:10
S85	2	"7225994".pn. and (mic or microphone) and reader and card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	OFF	2015/05/13 11:17

			IBM_TDB			
S86	106	("7225994").URPN.	USPAT	OR	OFF	2015/05/13 11:18
S87	1	"20050263590" and (mic or microphone) and reader and card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:21
S88	491360	(computer or device) same (mic or microphone) sam reader same (Smart near2 card) same (convert or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:24
S89	405	(computer or device) same (mic or microphone) same reader same (Smart near2 card) same (convert or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:25
S90	504	(computer or device) same (mic or microphone) same reader same (Smart near2 card) same (convert or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 11:25
S91	127	(computer or device) near5 (mic or microphone) same reader same (Smart near2 card) same (convert or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 11:25
S92	122	(computer or device) near5 (mic or microphone) same reader same (credit near2 card) same (convert or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 11:29
S93	3	(computer or device) near5 (mic or microphone) near5 reader same (credit near2 card) same (convert or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 11:29
S94	5	(computer or device) near5 (mic or microphone) near7 reader same (credit near2 card) same (convert or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 11:30
S95	457	(computer or device) near5 (mic or	US-PGPUB;	OR	ON	2015/05/13

		microphone)same (card near2 reader) same (convert or converter or digital or analog)	USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			11:31
S96	93	(computer or device) near5 (mic or microphone)near5 (card near2 reader) same (convert or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 11:31
S97	106	(computer or device) near5 (mic or microphone)same (card near2 reader) same (convert or converter or digital or analog) same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 11:31
S98	251	"card reader" same audio same (mic or microphone) same computer	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:39
S99	3	"card reader" same audio same (mic or microphone) same computer same converter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:40
S100	98	"card reader" same audio same (mic or microphone) same computer same (analog or digital)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:40
S101	54	"reader" same audio same (mic or microphone) same computer same (analog or digital) same (credit or debit or smart)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:44
S102	44	"reader" same sound same (mic or microphone) same computer same (analog or digital) same (credit or debit or smart)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:46
S103	2	"5799036".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	OFF	2015/05/13 11:53

			IBM_TDB			
S104	0	"5799036".pn. and reader and microphone	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:54
S105	1	"5799036".pn. and card and microphone	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:54
S106	94	("5799036").URPN.	USPAT	OR	OFF	2015/05/13 11:56
S107	1	S63 and "Card reader"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:56
S108	0	S106 and "Card reader"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:57
S109	10	S106 and "reader"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:57
S110	1	"card reader" same device same microphone same transaction same ("a/d" or "analog to digital" or "d/a" or "digital to analog")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:58
S111	1	"reader" same device same microphone same transaction same ("a/d" or "analog to digital" or "d/a" or "digital to analog")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:59
S112	10	"card reader" same device same microphone same ("a/d" or "analog to digital" or "d/a" or "digital to analog")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:59
S113	5	"card reader" same (phone or	US-PGPUB;	OR	OFF	2015/05/13

		computer or table or pda) same microphone same ("a/d" or "analog to digital" or "d/a" or "digital to analog")	USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			12:00
S114	6	"7810729".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 12:03
S115	7	"20020030871"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 12:07
S116	2	"20020030871" and converter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 12:07
S117	0	"20020030871" and digital and microphone and reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 12:08
S118	4	"7918394".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 12:09
S119	1	"6481623".pn. and network	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 16:21
S120	0	"6481623".pn. and network	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:21
S121	0	"6481623".pn. and internet	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:21
S122	0	"6481623".pn. and lan	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:21
S123	0	"6481623".pn. and wan	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:22
S124	1	"6481623".pn. and line	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:22
S125	1	"6481623".pn. and bit	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:24

S126	1	"6481623".pn. and "0"	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:24
S127	1	"6481623".pn. and "0" and (circuit or chip)	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:26
S128	1	"6481623".pn. and "128"	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:29
S129	1	"6481623".pn. and "40"	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:30
S130	1	"6481623".pn. and S128	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:30
S131	22	((digital to analog) or (a/d)) same converter same credit same data same reader same (microphone or audio or sound)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/14 10:11
S132	22	((digital to analog) or (d/a)) same converter same credit same data same reader same (microphone or audio or sound)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/14 10:13
S133	297	((digital to analog) or (d/a)) same credit same data same reader same (microphone or audio or sound)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/14 10:14
S134	297	((digital to analog) or (d/a)) same credit same data same reader same (microphone or audio or sound) same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/14 10:14
S135	2	(("digital to analog") or ("d/a")) same credit same data same reader same (microphone or audio or sound) same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/14 10:16
S136	2	(("digital to analog") or ("d/a")) same credit same data same reader same (microphone or audio or sound)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/14 10:16
S137	2	(("digital to analog") or ("d/a")) same credit same data same (scanner or reader) same (mic or microphone or audio or sound)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/14 10:17

S138	1	(("digital to analog") or ("d/a")) same transaction same data same (scanner or reader) same (mic or microphone or audio or sound)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/14 10:17
S139	24	(convert or converting or conversion) same (("credit card") near2 (data or information)) same analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/14 10:47
S140	5	"20030076045"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/14 11:11
S141	3	"KR 20030076045"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/14 11:12
S142	0	"blue toot typed portable credit card reader"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/14 11:17
S143	3	"blue tooth typed portable credit card reader"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/14 11:17
S144	4	"6607136".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/14 11:39
S145	2	"7761374".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/14 11:42
S146	14	"blue tooth" near2 "credit card"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	OFF	2015/05/14 12:09

			DERWENT; IBM_TDB			
S147	14	"blue tooth" near2 "credit card"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/14 12:09
S148	0	sound near2 key same microphone same credit same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:02
S149	133	sound same key same microphone same credit same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:02
S150	54	sound same key same microphone same credit same card same reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:02
S151	147	sound same microphone same credit same card same reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:03
S152	54	sound same microphone same credit same card same reader same key	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:03
S153	246	microphone same credit same card same reader same audio	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:13
S154	215	microphone same credit near3 card same reader same audio	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:13
S155	1946	microphone same credit near3 card ena3reader same audio	US-PGPUB; USPAT; USOCR;	OR	ON	2015/06/16 11:14

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S156	83	microphone same credit near3 card near3 reader same audio	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:14
S157	3	microphone same credit near3 card near3 reader near4 audio	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:14
S158	190	(headphones or mic or speaker) same credit near3 card near3 reader same audio	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:20
S159	18	(headphones or mic or speaker) same credit near3 card near3 reader near5 audio	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:21
S160	5	(headphones or mic or speaker) same credit near3 card near3 reader same audio same (digital) same analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:21
S161	7	(headphones or mic or speaker) same credit near3 card same reader same audio same (digital) same analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:22
S162	7	(headphones or mic or speaker) same credit same card same reader same audio same (digital) same analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:22
S163	86	(headphones or mic or speaker) same (debit or transaction or gift or prepaid or atm or credit) same card same reader same audio same (digital) same analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:23
S164	78434	(system same "Computer readable	US-PGPUB;	OR	OFF	2015/06/16

		medium").clm.	USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			12:21
S165	2584	S164 and 705/35-45.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/06/16 12:22
S166	9498	(system near3 "Computer readable medium").clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/06/16 12:22
S167	1	"US 20150178719"	US-PGPUB; USPAT; USOCR; DERWENT	OR	OFF	2015/07/07 11:19
S168	0	"G06 20/34" AND PAYMENT AND READER	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 11:26
S169	0	"G06 20/34" AND PAYMENT	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 11:26
S170	0	"G06 20/34"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/07/07 11:26
S171	11	"G06Q 20/34" AND READER	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/07/07 11:27
S172	3	"G06Q 20/34" AND MICROPHONE	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/07/07 11:31
S173	26	"G06Q 20/40" AND MICROPHONE	US-PGPUB; USPAT;	OR	ON	2015/07/07 11:32

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S174	94	("5799036").URPN.	USPAT	OR	OFF	2015/07/07 12:39
S175	1252	(converter or conversion) same signal same card same data same (mic or microphone or speaker)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/07/07 12:44
S176	55	(converter or conversion) same signal same card same data same (mic or microphone or speaker) same (credit or debit or transaction or debit or gift or "store value card")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/07/07 12:45
S177	68	(digital and analog) same signal same card same data same (mic or microphone or speaker) same (credit or debit or transaction or debit or gift or "store value card")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/07/07 12:49
S178	11	("2004/0026506").URPN.	USPAT	OR	OFF	2015/07/07 12:54
S179	1736	(convert or converting or conversion) same credit same card same data	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 12:57
S180	344	(convert or converting or conversion) same credit same card same data same reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 12:57
S181	70	(convert or converting or conversion) same credit same card same data same reader same (mic or speaker or microphone or "Recording device")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 12:57
S182	143	(convert or converting or conversion) same credit same card same data same reader same (mic or speaker or microphone or "Recording device")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/07/07 12:57
S183	14	"9003508".pn.	US-PGPUB; USPAT;	OR	OFF	2015/07/07 14:33

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S184	2	"20050276270"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 17:50
S185	1	"20050276270" and digital and microphone and reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 17:50
S186	10574	digital and microphone and reader and modulation	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 17:53
S187	2377	digital and microphone and reader and modulation and "credit card"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 17:54
S188	1982	digital and microphone and reader and modulation and "credit card" and analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 17:54
S189	869	digital same microphone and reader and modulation and "credit card" and analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 17:54
S190	62	digital same microphone same reader and modulation and "credit card" and analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 17:54
S191	212	digital same microphone same reader and modulation and "card" and analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 17:57

S192	173	digital same microphone same reader and modulation and "card" and analog and (converter or conversion or converting)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 17:57
S193	63	digital same microphone same reader and modulation and "card" and analog and (converter or conversion or converting) and (transaction or credit or debit or atme)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 17:58
S194	66	digital same microphone same reader and modulation and "card" and analog and (converter or conversion or converting) and (transaction or credit or debit or atm)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 17:59
S195	103	digital same microphone same reader and modulation and "card" and analog and (converter or conversion or converting) and (transaction or credit or debit or atm)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/07/07 17:59
S196	42	personal near2 secure near2 information near2 device	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 10:29
S197	47	personal near2 secure near2 information near2 device	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 10:30
S198	17	S197 and (mic or microphone or speaker or audio)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 10:34
S199	0	"reader for integrated circuit card used as a e.g. bank card, credit card"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 10:43
S200	0	"reader for integrated circuit card used as a e.g. bank card, credit card"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	ON	2015/09/10 10:43

			DERWENT; IBM_TDB			
S201	32	reader same "integrated circuit card" same bank same card same (mic or microphone or speaker or audio)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 10:44
S202	0	reader same "integrated circuit card" same bank same card same (mic or microphone or speaker or audio) same (converter or conversion or converting)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 10:44
S203	28	reader same "integrated circuit card" same bank same card same (mic or microphone or speaker or audio) and (converter or conversion or converting)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 10:44
S204	1	acoustic same transducer same earphone same reader same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 10:46
S205	1	acoustic same transducer same earphone same reader same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 10:47
S206	1	acoustic same (converter or conversion or converting) same earphone same reader same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 10:48
S207	332	(audio or sound or acoustic) same (converter or conversion or converting) same (mic or microphone or speaker or earphone) same reader same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 10:48
S208	23	(audio or sound or acoustic) same (converter or conversion or converting) same (mic or microphone or speaker or earphone) same reader same card same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 10:49
S209	5	"20120052910"	US-PGPUB; USPAT; USOCR;	OR	OFF	2015/09/10 10:56

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S210	2	"7896248".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 10:57
S211	0	mobile same magnetice same reader same (audio or microphone or sound or acoustic or mic or speaker or earphone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 11:04
S212	997	mobile same magnetic same reader same (audio or microphone or sound or acoustic or mic or speaker or earphone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 11:04
S213	29	mobile same magnetic same reader same (audio or microphone or sound or acoustic or mic or speaker or earphone) same pin	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 11:04
S214	162	mobile same card same reader same (audio or microphone or sound or acoustic or mic or speaker or earphone) same pin	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 11:08
S215	103	mobile same card same reader same (audio or microphone or sound or acoustic or mic or speaker or earphone) same pin same (analog or digital)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 11:08
S216	77	mobile same card same reader same (audio or microphone or sound or acoustic or mic or speaker or earphone) same transaction same (analog or digital)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 11:11
S217	370	(phone or device or pda or tablet or laptop or computer) same card same reader same (audio or microphone or sound or acoustic or mic or speaker or earphone) same transaction same (analog or digital)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 11:12
S218	455	(phone or device or pda or tablet or	US-PGPUB;	OR	ON	2015/09/10

		laptop or computer) same card same reader same (audio or microphone or sound or acoustic or mic or speaker or earphone) same (convert or converting or conversion) same (analog or digital)	USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			11:13
S219	95	(phone or device or pda or tablet or laptop or computer) same card same reader same (audio or microphone or sound or acoustic or mic or speaker or earphone) same (convert or converting or conversion) same (analog or digital) same pin	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 11:13
S220	90	(phone or device or pda or tablet or laptop or computer) same card same reader same (audio or microphone or sound or acoustic or mic or speaker or earphone) same (convert or converting or conversion) same (analog or digital) same (output) same pin	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 11:14
S221	6	output same (plug or pin) same jack same (audio or speaker or mic or microphone or headset or earphone) same analog same digital same reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 11:17
S222	39	output same (plug or pin) same jack same (audio or speaker or mic or microphone or headset or earphone) same analog same digital same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 11:20
S223	0	output same (plug or pin) same jack same (audio or speaker or mic or microphone or headset or earphone) same analog same digital same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 11:25
S224	26	output same (plug or pin or jack) same (audio or speaker or mic or microphone or headset or earphone) same analog same digital same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 11:25
S225	7	"20020030871"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 12:46
S226	3	"20050247787"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	OFF	2015/09/10 12:51

			DERWENT; IBM_TDB			
S227	8	"20040093436"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 12:59
S228	2	"6481623".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 13:00
S229	122	("6481623").URPN.	USPAT	OR	OFF	2015/09/10 13:03
S230	8	"20040093436"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 13:11
S231	3	("2004/0093436").URPN.	USPAT	OR	OFF	2015/09/10 13:11
S232	36	(modem or modulation or demodulation) same reader same card same analog same digital same smart	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 13:14
S233	15	(modem or modulation or demodulation) same reader same card same analog same digital same smart same (plug or jack or port) same (audio or sound or acoustic)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 13:14
S234	8	"20020091633"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 14:54
S235	16	("2002/0091633").URPN.	USPAT	OR	OFF	2015/09/10 14:57
S236	0	"20020091633" and analog	USPAT	OR	OFF	2015/09/10 14:59
S237	0	"20020091633" and analog	USPAT	OR	ON	2015/09/10 15:00
S238	0	"20020091633" and convert	USPAT	OR	ON	2015/09/10 15:00
S239	1	"20020091633" and analog	US-PGPUB; USPAT; USOCR;	OR	ON	2015/09/10 15:00

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S240	611	card same reader same digital same analog same credit	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:02
S241	33	card same reader same digital same analog same credit same converter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:02
S242	39	card same reader same digital same analog same transaction same converter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:04
S243	10	card same reader same ("a/d" or "d/a") same transaction same converter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:05
S244	1	card same reader same ("digital to analog" or "d/a") same transaction same converter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:07
S245	2	card same reader same ("digital to analog" or "d/a") same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:08
S246	27	card same reader same ("digital to analog" or "d/a") same audio	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:08
S247	3	card same reader same ("digital to analog" or "d/a") same payment	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:10
S248	0	card same reader same ("digital to	US-PGPUB;	OR	ON	2015/09/10

		analog" or "d/a") same financial	USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			15:10
S249	0	card same reader same ("digital to analog" or "d/a") same merchant	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:10
S250	2	transaction same card same reader same ("digital to analog" or "d/a")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:11
S251	96	card same reader same ("digital to analog" or "d/a")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:11
S252	3	"20040093436" and phone	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 15:29
S253	2615	(smart near2 phone) same microphone same (analog or digital or d/a or "digital to analog")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:30
S254	40	(smart near2 phone) same microphone same (analog or digital or d/a or "digital to analog") same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:31
S255	428	(smart near2 phone) same microphone same (analog or digital or d/a or "digital to analog") same (converter or conversion or converting)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:32
S256	22	(smart near2 phone) same microphone near3 (analog or digital or d/a or "digital to analog") same (converter or conversion or converting)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2015/09/10 15:33

			IBM_TDB			
S257	45	(smart near2 phone) same microphone near5 (analog or digital or d/a or "digital to analog") same (converter or conversion or converting)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:33
S258	4944	(phone or pda or tablet) same microphone same (analog or digital or d/a or "digital to analog") same (converter or conversion or converting)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:34
S259	37	(phone or pda or tablet) same microphone same (analog or digital or d/a or "digital to analog") same (converter or conversion or converting) same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:35
S260	442	(phone or pda or tablet) same microphone same (analog or digital or d/a or "digital to analog") same (converter or conversion or converting) same smart	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:37
S261	27	(phone or pda or tablet) same microphone same (analog or digital or d/a or "digital to analog") same (converter or conversion or converting) same smart same reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:37
S262	116	(phone or pda or tablet) same microphone same (analog or digital or d/a or "digital to analog") same (converter or conversion or converting) same reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:38
S263	5920	(phone or pda or tablet) same (mic or speaker or microphone or headphone) same (analog or digital or d/a or "digital to analog") same (converter or conversion or converting)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:42
S264	758	(phone or pda or tablet) same (mic or speaker or microphone or headphone) same (analog or digital or d/a or "digital to analog") same (converter or conversion or converting) same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:42
S266	11	"2002030871"	US-PGPUB; USPAT; USOCR; FPRS;	OR	OFF	2015/09/10 16:04

			EPO; JPO; DERWENT; IBM_TDB			
S267	11	"2002030871"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 16:04
S268	7	"20020030871"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 16:05
S269	3	"20050247787"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 16:05
S270	6	"7810729".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 16:06
S271	6	"7810729".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 16:06
S272	62	("20020002507" | "20020030871" | "20040087339" | "20040204074" | "20050247787" | "20070250623" | "20080059370" | "20080059375" | "4845740" | "5764742" | "5850599" | "6129277" | "6481623" | "6579728" | "7252232").PN. OR ("7810729").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2015/09/10 16:06
S273	1365880	pda with microphone with digital or audio	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 16:38
S274	689	pda with microphone with digital same audio	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 16:38
S275	546	pda with microphone with digital with	US-PGPUB;	OR	ON	2015/09/10

		audio	USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			16:38
S276	5	pda with microphone with digital with audio same conversion	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 16:39
S277	7	pda with microphone with digital same audio same conversion	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 16:41
S278	10	pda same microphone with digital same audio same conversion	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 16:44
S279	161	pda same microphone same digital same audio same conversion	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 16:44
S280	10	pda same microphone same digital same audio same conversion same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 16:44
S281	8	"20040093436"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/11 08:59
S282	3	"20040093436" and reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/11 09:00
S283	377	"colnot"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	OFF	2015/09/11 15:38

			IBM_TDB			
S284	55	"colnot" and analog and digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/11 15:38
S285	64	"colnot" and analog and digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/11 15:39
S286	14	"9003508".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/11 15:46
S287	3	"US 7620759"	US-PGPUB; USPAT; USOCR; DERWENT	OR	OFF	2015/09/11 15:49
S288	3	analog same digital same sound same generator same card same reader same (mic or microphone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/11 15:56
S289	3	analog same digital same (Acoustic or sound) same generator same card same reader same (mic or microphone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/11 15:56
S290	90	analog same digital same (Acoustic or sound) same (device or fob or ring or key) same card same reader same (mic or microphone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/11 15:57
S291	3	analog same digital same (Acoustic or sound) same (device or fob or ring or key) same card same reader same (mic or microphone) same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/11 15:57
S292	0	analog same digital same (Acoustic or sound) same (device or fob or ring or key) same card same reader same (mic or microphone) same (jack)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/11 15:57

S293	62	analog same digital same (Acoustic or sound) same (device or fob or ring or key) same card same reader same (mic or microphone) same (jack or output or connector)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/11 15:58
S294	143	(phone or pda or tablet) same (mic or speaker or microphone or headphone) same (analog or digital or d/a or "digital to analog") same (converter or conversion or converting) same card same (jack or plug or connector)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/15 11:57
S295	47	((digital near2 analog) or d/a) same converter same ((credit or transaction or atm or debit) near3 card) same (sound or audio or mic or microphone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/15 11:58
S296	14	S295 AND ((G06K19/07 OR H04M2250/14 OR G06Q20/34 OR G06Q20/123 OR G06Q20/341).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/15 11:59
S297	6	"7810729".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/23 15:34
S298	5	"20040087339"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/23 15:41
S299	0	"20040087339" and (mic or microphone or speaker)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/23 15:43
S300	19	"8701996".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/23 15:43
S301	17	"1747635"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	OFF	2015/10/23 15:44

			DERWENT; IBM_TDB			
S302	2	"20050236480" and (mic or microphone or speaker or audio)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/10/23 15:48
S303	160	("20010001856" | "20020002507" | "20020030871" | "20020077974" | "20020099648" | "20020108062" | "20020169541" | "20020188535" | "20030089772" | "20030132300" | "20030135463" | "20030144040" | "20040012875" | "20040041911" | "20040058705" | "20040087339" | "20040093496" | "20040104268" | "20040127256" | "20040128256" | "20040204074" | "20040230489" | "20040230526" | "20050077870" | "20050209719" | "20050219728" | "20050236480" | "20050242173" | "20050247787" | "20060049256" | "20060094481" | "20060122902" | "20060142058" | "20060208066" | "20060223580" | "20060234771" | "20060273158" | "20070067833" | "20070100651" | "20070124211" | "20070155430" | "20070174080" | "20070221728" | "20070244811" | "20070250623" | "20070255620" | "20070255653" | "20080027815" | "20080040265" | "20080040274" | "20080059370" | "20080059375" | "20080103972" | "20080147564" | "20080172306" | "20080177662" | "20080208762" | "20080238610" | "20080249939" | "20080275779" | "20090068982" | "20090098908" | "20090100168" | "20090104920" | "20090117883" | "20090119190" | "20090125429" | "20090144161" | "20090159681" | "20090187492" | "20100063893" | "20100108762" | "20100184479" | "20100191653" | "20100222000" | "20100243732" | "20100314446" | "20110084131" | "20110084139" | "20110084147" | "20110137803" | "20110161235" | "20110174879" | "20110180601" | "20110191196" | "20110198395" | "20110202463" | "20110258120" | "20110259957" | "20110313880" | "20120008851" | "20120012653" | "20120016794").PN. OR ("20120052910" | "20120246074" | "4035614" | "4254441" | "4591937" | "4609957" | "4845740" | "5266789" | "5434400" | "5463678" | "5589855" | "5603078" | "5729591" | "5764742" | "5850599" | "5878337" | "5945654" | "5991749" | "6006109" | "6021944" | "6032859" | "6061666" | "6129277" |	US-PGPUB; USPAT; USOCR	OR	OFF	2015/10/23 15:51

		"6234389" | "6308227" | "6363139" | "6400517" | "6431445" | "6476743" | "6481623" | "6497368" | "6536670" | "6579728" | "6612488" | "6813608" | "6832721" | "6850147" | "6868391" | "6896182" | "6944782" | "7003316" | "7013149" | "7149296" | "7163148" | "7167711" | "7252232" | "7309012" | "7324836" | "7363054" | "7409234" | "7433452" | "7505762" | "7506812" | "7520430" | "7581678" | "7600673" | "7708189" | "7793834" | "7810729" | "7869591" | "7896248" | "7918394" | "7945494" | "8015070" | "8231055" | "8376239" | "8413901" | "WO2010097711" | "WO2010111130" | "WO2010135174").PN.				
S304	68	S303 and (mic or microphone or speaker or audio) and reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/10/23 15:53
S305	2	"7376431".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 10:24
S306	0	"7376431".pn. and (mic or microphone or speaker)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 10:25
S307	0	"7376431".pn. and (mic or microphone or speaker or audi)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 10:25
S308	0	"7376431".pn. and (mic or microphone or speaker or audio)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 10:25
S309	4	"2001084816"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 10:34
S310	4	"2001084816"	US-PGPUB; USPAT; USOCR;	OR	ON	2015/10/26 10:34

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S311	1	"data output device and information collecting system comprising data output device"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 10:34
S312	3	"US 9003508"	US-PGPUB; USPAT; USOCR; DERWENT	OR	OFF	2015/10/26 11:27
S313	14	"9003508".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 11:28
S314	2	"US 20150178719"	US-PGPUB; USPAT; USOCR; DERWENT	OR	OFF	2015/10/26 11:46
S315	8	"20040104628"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 14:04
S316	5	"20040104268"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 14:05
S317	4	"20040093496"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 14:07
S318	0	"20040093496" and phone	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 14:26
S319	3	"20040093436" and phone	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 14:34

S320	1	"20150178719" and phone	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 14:39
S321	1	"20150178719" and phone	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/10/26 14:39
S322	163	"G06Q 20/341"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 15:10
S323	37	"G06Q 20/341" AND PHONE AND CARD AND READER	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 15:10
S324	795	235/380.CCLS. AND "CARD READER" AND (MICROPHONE OR MIC OR SPEAKER)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 15:19
S325	58	235/380.CCLS. AND "CARD READER" AND (MICROPHONE OR MIC OR SPEAKER) AND (SMART NEAR2 PHONE)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 15:19
S326	1	"20150178719" and modulation	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/10/26 15:32
S327	1	"20150178719" and (modulating or modulation or demodulate or demodulation) and reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/10/26 15:34
S328	1	"20150178719" and (modulating or modulation or demodulate or demodulation and modulated) and reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	ON	2015/10/26 15:34

			DERWENT; IBM_TDB			
S329	232	card same reader same (modulating or modulation or demodulate or demodulation and modulated) same mobile	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/10/26 15:45
S330	33	card same reader same (modulating or modulation or demodulate or demodulation and modulated) same mobile same microphone	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/10/26 15:46
S331	25	card same reader same (modulating or modulation or demodulate or demodulation and modulated) same phone same microphone	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/10/26 15:47
S332	1	card same reader same (modulating or modulation or demodulate or demodulation and modulated) same phone same mic	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/10/26 15:48
S333	25	card same reader same (modulating or modulation or demodulate or demodulation and modulated) same phone same speaker	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/10/26 15:48
S334	2	card same reader same (modulating or modulation or demodulate or demodulation and modulated) same pda same speaker	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/10/26 15:50
S335	2	card same reader same (modulating or modulation or demodulate or demodulation and modulated) same pda same speaker	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/10/26 15:50
S336	7	card same reader same (modulating or modulation or demodulate or demodulation and modulated) same square	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/10/26 16:23
S337	10	square.as. and microphone and "card reader" and "Smart phone"	US-PGPUB; USPAT; USOCR;	OR	OFF	2015/10/26 16:24

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S338	2	"62234389".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 16:29
S339	2	"6234389".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 16:30
S340	7	"8011587".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/10/26 16:31
S341	502	((smart or wireless or mobile or handheld or portable or cellular or cell) near2 (phone)) with (card near2 reader) same (audio or mic or microphone or headset or sound) same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/29 11:34
S342	319	((smart or wireless or mobile or handheld or portable or cellular or cell) near2 (phone)) with (card near2 reader) with (audio or mic or microphone or headset or sound) same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/29 11:35
S343	319	((smart or wireless or mobile or handheld or portable or cellular or cell) near2 (phone)) with (card near2 reader) with (audio or mic or microphone or headset or sound) with card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/29 11:35
S344	70	((smart or wireless or mobile or handheld or portable or cellular or cell) near2 (phone)) near3 (card near2 reader) with (audio or mic or microphone or headset or sound) with card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/29 11:35
S345	41	S343 AND ((G06Q20/20 OR G06Q20/32 OR G06Q20/325 OR G06Q20/34 OR G07F7/0873 OR G07F7/0886).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/29 11:56
S346	6	"7810729".PN.	US-PGPUB;	OR	OFF	2016/06/29

			USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			11:59
S347	7	"20020030871"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:04
S348	0	"20020030871" AND READER	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:05
S349	3	"20050247787"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:07
S350	0	"20050247787" AND (AUDIO OR MICROPHONE OR SOUND OR HEADSET OR EARPHONE)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:08
S351	0	"20050247787" AND (AUDIO OR MICROPHONE OR SOUND OR HEADSET OR EARPHONE)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/29 12:08
S352	83	(AUDIO NEAR2 JACK) SAME PHONE SAME CARD SAME READER	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:10
S353	144	((AUDIO OR MICROPHONE OR EARPHONE OR HEADSET) NEAR2 JACK) SAME PHONE SAME CARD SAME READER	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/29 12:12
S354	247	((AUDIO OR MICROPHONE OR EARPHONE OR HEADSET) NEAR2 (CONNECTOR OR JACK)) SAME PHONE SAME CARD SAME READER	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2016/06/29 12:12

			IBM_TDB			
S355	0	"73776431".PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:17
S356	2	"7376431".PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:17
S357	3	"8615445".PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:19
S358	1	"8615445".PN. AND "MICROPHONE PORT"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:20
S359	1	"8615445".PN. AND "MICROPHONE PORT"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/29 12:20
S360	0	"20010848816"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:25
S361	4	"2001084816"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:25
S362	0	"2001084816" AND MICROPHONE AND READER	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:26
S363	0	"20010035459" AND MICROPHONE AND READER	US-PGPUB; USPAT; USOCR; FPRS;	OR	OFF	2016/06/29 12:27

			EPO; JPO; DERWENT; IBM_TDB			
S364	6	"20010035459"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:27
S365	4	"6006109".PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:35
S366	0	"6006109".PN. AND READER	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:35
S367	0	"6006109".PN. AND CARD	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:36
S368	0	"6006109".PN. AND CARD	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/29 12:36
S369	81	("6006109").URPN.	USPAT	OR	OFF	2016/06/29 12:36
S370	49	S369 AND READER	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:36
S371	4	"5388148".PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/29 12:39
S372	64	("5388148").URPN.	USPAT	OR	OFF	2016/06/29 12:39
S373	20	S372 AND READER	US-PGPUB; USPAT; USOCR; FPRS;	OR	OFF	2016/06/29 12:40

			EPO; JPO; DERWENT; IBM_TDB			
S374	14	S372 AND READER AND (SOUND OR AUDIO OR MICROPHONE OR EARPHONE OR MIC OR HEADPHONE)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/29 12:42
S375	1	"6607136".PN. AND PHONE	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 12:35
S376	172	(SMART NEAR2 PHONE) SAME SERVER SAME INTERNET SAME TRANSACTION SAME (BANK OR "FINANCIAL INSTITUTION" OR MERCHANT OR RETAILER)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/30 12:37
S377	3	"7096003".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 14:52
S378	2	"20040230489"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 15:23
S379	52	microphone same port same mobile same server same reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/30 15:35
S380	1443	phone same (card near2 reader) same server	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 15:40
S381	557	(mobile near2 phone) same (card near2 reader) same server	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/30 15:41
S382	47	(mobile near2 phone) same (card near2 reader) same server same	US-PGPUB; USPAT;	OR	ON	2016/06/30 15:41

		microphone	USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S383	252	(mobile near2 phone) with (card near2 reader) same server	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/30 15:42
S384	168	(mobile near2 phone) with (card near2 reader) with server	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/30 15:42
S385	17	(cvv or "card verification value") same digital same (Data or string or code) same transaction same purchase	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 15:52
S386	43	"7761374" and digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 15:54
S387	1	"7761374".pn. and digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 15:54
S388	1	"7761374".pn. and (hash or cryptogram or digital)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 15:57
S389	23	(cvv or "card verification value") near2 (hash or cryptogram or digital)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 15:59
S390	266	(cvv or "card verification value") same (hash or cryptogram or digital)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:00

S391	141	(cvv or "card verification value") same (hash or cryptogram or digital) same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:00
S392	1311	(cvv or "card verification value") same (zero or one or logic or digital)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/30 16:05
S393	648	(cvv or "card verification value") same (zero or one or logic or digital) same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/30 16:05
S394	641	(cvv or "card verification value") same (zero or one or digital) same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/30 16:05
S395	100	(cvv or "card verification value") same (zero or digital) same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/30 16:06
S396	5	(cvv or "card verification value") near2 (digital) same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/30 16:07
S397	44	(cvv or "card verification value") with (digital) same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/30 16:08
S398	60	(cvv or "card verification value") with (digital)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/30 16:09
S399	10	(cvv or "card verification value") near3 (digital)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	ON	2016/06/30 16:09

			DERWENT; IBM_TDB			
S400	40	(cvv or "card verification value") near5 (digital)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/30 16:10
S401	42	(cvv or "card verification value") near5 (digital or zero)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/30 16:10
S402	246	(cvv or "card verification value") near5 (digital or zero or one)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/30 16:10
S403	179	colnot.in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:12
S404	4	S403 and cvv	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:12
S405	110	(card near2 reader) same ("card verification value" or cvv) same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:13
S406	11	(card near2 reader) same ("card verification value" or cvv) same transaction same (encrypt or encrypting or encryption)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:14
S407	16	("card verification value" or cvv) same transaction same (hash)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:20
S408	2	("card verification value" or cvv) same digital same (hash)	US-PGPUB; USPAT; USOCR;	OR	OFF	2016/06/30 16:21

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S409	97362	("card verification value" or cvv or (card near2 identifier or idenfication or identifying)) same digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:27
S410	2890	("card verification value" or cvv or (card near2 identifier or idenfication or identifying)) same digital same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:27
S411	700511	("card verification value" or cvv or (card near2 identifier or idenfication or identifying)) same digital same transaction (purchase or financial)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:27
S412	983	("card verification value" or cvv or (card near2 identifier or idenfication or identifying)) same digital same transaction same (purchase or financial)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:27
S413	71	(card near2 (identifier or idenfication or identifying)) same digital same transaction same (purchase or financial)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:29
S414	4	"09/754665"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:34
S415	9	"09/754465"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:35
S416	2	"20010037312" and digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:36
S417	35	digital near2 credit near2 card near2	US-PGPUB;	OR	OFF	2016/06/30

		data	USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			16:40
S418	2	"20090292642"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:51
S419	11	"20040039919"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:57
S420	0	"20040039919" and S384	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:58
S421	2	"20040039919" and "802"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:58
S422	2	"20040039919" and "802" and digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 16:59
S423	2	"20040039919" and signature	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/06/30 17:03
S424	2	"20040039919" and signature	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/30 17:03
S425	2	"20040039919" and signature and transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2016/06/30 17:06

			IBM_TDB			
S426	2	"20040039919" and "digital signature"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/30 17:10

7/2/2016 12:18:38 PM
C:\Users\mshaikh\Documents\EAST\Workspaces\14636674.wsp

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14636674	COLNOT ET AL.
	Examiner	Art Unit
	MOHAMMAD Z SHAIKH	3694

CPC- SEARCHED		
Symbol	Date	Examiner
G06Q 20/3272	5/14/2015	/MZS/
G06Q 20/3278	5/14/2015	/MZS/
G06K19/07	9/15/2015	/MZS/
H04M2250/14	9/15/2015	/MZS/
G06Q20/34	9/15/2015	/MZS.
G06Q20/123	9/15/2015	/MZS/
G06Q20/341	9/15/2015	/MZS/
G06Q20/20 OR G06Q20/32 OR G06Q20/325 OR G06Q20/34 OR G07F7/0873 OR G07F7/0886	6/29/2016	/MZS/

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner

SEARCH NOTES		
Search Notes	Date	Examiner
EAST	5/14/2015	/MZS/
EAST	9/15/2015	/MZS/
EAST	6/29/2016	/MZS/

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner

Doc code: RCEX
Doc description: Request for Continued Examination (RCE)

PTO/SB/30EFS (07-09)
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REQUEST FOR CONTINUED EXAMINATION(RCE)TRANSMITTAL
(Submitted Only via EFS-Web)

Application Number	14636674	Filing Date	2015-03-03	Docket Number (if applicable)	P1987.02	Art Unit	3694
First Named Inventor	Vincent Cedric Colnot			Examiner Name	Mohammad Z Shaikh		

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 500534

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

☒ Patent Practitioner Signature

☐ Applicant Signature

PTO/SB/30EFS (07-09)
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Signature of Registered U.S. Patent Practitioner			
Signature	/Donald R. Boys/	Date (YYYY-MM-DD)	2015-12-07
Name	Donald R. Boys	Registration Number	35074

This collection of information is required by 37 CFR 1.114. 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 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.

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

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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 the Freedom of Information Act requires disclosure of these records.

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 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.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Art Unit: 3694 Examiner: Shaikh, Mohammad Z

Confirmation No.: 3697

In Re:	Vincent Cedric Colnot et al.
Case:	P1987.02
Serial No.:	14/636,674
Filed:	March 3, 2015
Subject:	Methods and Apparatus for Enabling Secure Network-Based Transactions

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Response B

In the Claims

All of the claims standing for examination are reproduced below with appropriate status indication.

1. (Currently amended) An apparatus comprising:

a card reader having an input interface configured to accept ~~digital~~ data from an output interface of a transaction card, and an output pin configured to engage in a microphone port of a smart telephone, the card reader providing data accepted from the output interface of the transaction card to the output pin; and

~~conversion circuitry converting the digital data to an analog modulated signal; and~~

~~an output pin from the card reader, the output pin configured to engage in a microphone port of a personal computing device or a smart telephone, the conversion circuitry providing the analog modulated signal to the output pin;~~

coded instructions stored in a non-transitory medium of a first Internet-connected server, and accessible by a user of the card reader;

wherein the coded instructions provide functionality for executing in a smart telephone, deriving digital data from the data provided by the card reader to a microphone port of a smart telephone, establishing data exchange between a smart telephone and a second Internet-connected server providing services to a financial institution or an on-line merchant, and facilitating transactions by an owner of a transaction card with the financial institution or purchases by the owner of the transaction card with an on-line merchant.

2-7. (Cancelled)

8. (Currently amended) The apparatus of claim [[7]] 1 wherein the coded instructions further provide functionality to ~~accept~~ retrieve a card verification code (CVV) as a digital string from the data provided by the card reader, to use the CVV in ~~the~~ purchases or

transactions by the owner of the transaction card~~, and for each transaction or purchase accomplished, a new CVV is created and stored~~.

9. (Currently amended) A method comprising:

receiving ~~digital~~ data ~~at an input interface of a card reader from an output interface of a transaction card~~ in a smart telephone from a microphone port of the smart telephone;

converting the ~~digital~~ data to ~~an analog modulated signal~~ digital data by ~~conversion circuitry~~ executing coded instructions from a non-transitory medium on a processor in the smart telephone; ~~and~~

establishing data exchange with an Internet-connected server providing services to a financial institution or an on-line merchant; and

facilitating transactions by an owner of a transaction card with the financial institution or purchases by the owner of the transaction card with an on-line merchant ~~providing the analog modulated signal to an output pin of the card reader, the output pin configured to engage in a microphone port of a personal computing device or a smart telephone~~.

10-15. (Cancelled)

16. (Currently amended) The method of claim [[15]] 9 wherein the coded instructions operate to ~~accept~~ derive a card verification code (CVV) from the data received on the microphone port, and to use the CVV in the purchases or transactions~~, and for each transaction or purchase accomplished, a new CVV is created and stored~~.

17. (New) A smart telephone, comprising:

a microphone port receiving data; and

coded instructions executing on a processor of the smart telephone from a non-transitory medium;

wherein the coded instructions provide functions for retrieving digital data from the data received on the microphone port, establishing data exchange with an Internet-connected server providing services to a financial institution or an on-line merchant, and facilitating transactions by an owner of a transaction card with the financial institution or purchases by the owner of the transaction card with an on-line merchant.

REMARKS

This response is to the Final Action mailed on 09/22/2015.

In the Final action the examiner rejects claim 2 under 35 USC 102 over Colnot, of record, saying:

"Colnot discloses the apparatus of claim 1. Colnot discloses further comprising a personal computing device or a smart telephone configured to communicate on a network, the personal computing device or the smart telephone comprising a microphone port engaged with the output pin to receive the analog modulated signal and conversion circuitry for converting the analog modulated signal to digital data for transmission on the network (At least: [0020] to [0022]; Fig 3).

Examiner notes that there is optional language, and therefore only the "personal computing device" limitation *is being addressed.* (Emphasis added).

Applicant asked for an after-final interview to address the rejection of claim 2, and was informed by the examiner in a voice message that the examiner ",,,does not grant after-final interviews…". The applicant accordingly amended the claims and prepared an after-final amendment to hopefully get consideration of a simple amendment that the applicant believed might place the case in condition for allowance.

The examiner responded to the after-final submission that the proposed claims did not place the case in condition for allowance, that the claims would not be admitted, and also kindly provided a new reference for the case that had been only recently discovered, that reference being Publication 2005/0075134 to inventor Steenstra, which was published April 7, 2005, and has a priority date of September 23, 2003.

Accordingly the applicant has again amended the claims, bearing in mind all of the cited references and the newly provided reference Steenstra, which has yet to be formally cited or applied.

Claim 1 as amended herein now recites:

1. (Currently amended) An apparatus comprising:

a card reader having an input interface configured to accept data from an output interface of a transaction card, and an output pin configured to engage in a microphone port of a smart telephone, the card reader providing data accepted from the output interface of the transaction card to the output pin; and

coded instructions stored in a non-transitory medium of a first Internet-connected server, and accessible by a user of the card reader;

wherein the coded instructions provide functionality for executing in a smart telephone, deriving digital data from the data provided by the card reader to a microphone port of a smart telephone, establishing data exchange between a smart telephone and a second Internet-connected server providing services to a financial institution or an on-line merchant, and facilitating transactions by an owner of a transaction card with the financial institution or purchases by the owner of the transaction card with an on-line merchant.

Claim 1 as now standing positively recites a card reader and coded instructions available to a user of the card reader. A smart telephone is not positively recited, although the coded instructions are recited as executable in a smart telephone and as providing certain functions in a smart telephone.

It is applicant's belief that the Steenstra reference seems to support that digital data may be recovered from an analog data stream, but the more narrow circumstances of recovering a digital string from an analog stream on a microphone port of a smart telephone, that analog string representing data from a transaction card, is *not* taught or suggested by Steenstra. Further, Colnot was applied with reference to the personal computer aspects, not the smart telephone, and applicant is quite sure that coded instructions executing in smart telephones were not extracting digital strings from analog input on a microphone port, and certainly not providing data communication with

Internet-connected servers and facilitating transactions at a financial institution or purchase by an owner of a transaction card.

Applicant believes these limitations in combination and in interaction to one another are not taught or suggested in the art thus far cited and applied, including Steenstra, and provide that claim 1 as amended is patentable to applicant over the art cited and applied taken either alone or in combination.

Claim 1 as amended is thus patentable to the applicant, and claim 8 is patentable at least as depended from a patentable claim.

Claim 9 for a method is amended herein to recite:

9. (Currently amended) A method comprising:

receiving data in a smart telephone from a microphone port of the smart telephone;

converting the data to digital data by executing coded instructions from a non-transitory medium on a processor in the smart telephone;

establishing data exchange with an Internet-connected server providing services to a financial institution or an on-line merchant; and

facilitating transactions by an owner of a transaction card with the financial institution or purchases by the owner of the transaction card with an on-line merchant.

Claim 9 positively recites a smart telephone and coded instructions executing on a processor in the smart telephone. The applicant believes, as in the case of claim 1 discussed above, that the functionality of the coded instructions positively claimed, operating in a smart telephone, is not taught in any of the cited art, including that of Steenstra, and that claim 9 is thus patentable to applicant over the art thus far cited, including the teaching of Steenstra. Claim16 is thus patentable at least as depended from patentable claim.

A new claim 17 has been added to recite a smart telephone, following the limitations in claim 9 as amended, and the applicant believes the functionality of the coded instructions in claim 17, as argued above for claim 9, provide that new claim 17 is patentable to the applicant over the art thus far cited and applied, including the art of Steenstra.

Summary

As all of the claims, as amended and argued above, have been shown to be patentable over the art cited and applied, applicant respectfully requests reconsideration and that the case be passed quickly to issue.

If any fees are due beyond fees paid with this amendment, authorization is made to deduct those fees from deposit account 50-0534. If any time extension is needed beyond any extension requested with this amendment, such extension is hereby requested.

Respectfully Submitted,
Vincent Cedric Colnot et al.

By */Donald R. Boys/*
Donald R. Boys
Reg. No. 35,074

Central Coast Patent Agency, Inc.
3 Hangar Way, Suite D
Watsonville, CA 95076
(831) 768-1755

Electronic Patent Application Fee Transmittal

Application Number:	14636674
Filing Date:	03-Mar-2015
Title of Invention:	Methods and Apparatus for Enabling Secure Network-Based Transactions
First Named Inventor/Applicant Name:	Vincent Cedric Colnot
Filer:	Donald Rex Boys/Sheri Beasley
Attorney Docket Number:	P1987.02

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($)
Miscellaneous:				
Request for Continued Examination	2801	1	600	600
		Total in USD ($)		**600**

Electronic Acknowledgement Receipt

EFS ID:	24282625
Application Number:	14636674
International Application Number:	
Confirmation Number:	3697
Title of Invention:	Methods and Apparatus for Enabling Secure Network-Based Transactions
First Named Inventor/Applicant Name:	Vincent Cedric Colnot
Customer Number:	24739
Filer:	Donald Rex Boys/Sheri Beasley
Filer Authorized By:	Donald Rex Boys
Attorney Docket Number:	P1987.02
Receipt Date:	07-DEC-2015
Filing Date:	03-MAR-2015
Time Stamp:	15:48:28
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	$600
RAM confirmation Number	2439
Deposit Account	500534
Authorized User	BOYS, DONALD R
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Request for Continued Examination (RCE)	sb0030e-RCE.pdf	697271 8bb92e3479899543be9ba497348e83d5e52fef50	no	3
Warnings:					
Information:					
2	Amendment Submitted/Entered with Filing of CPA/RCE	1987_02oar3.pdf	30218 b96a88278f6c637829322eacec2a733426c089d6	no	8
Warnings:					
Information:					
3	Fee Worksheet (SB06)	fee-info.pdf	30796 b5a36501c67e73e0637a222d157457990ed71ef2	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	758285		

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.

PTO/SB/06 (09-11)
Approved for use through 1/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 14/636,674	Filing Date 03/03/2015	☐ To be Mailed

ENTITY: ☐ LARGE ☒ SMALL ☐ MICRO

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) 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), (i), 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 $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =	
☐ 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

AMENDMENT	12/07/2015	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	* 5	Minus	** 20	= 0	X $40 =	0
	Independent (37 CFR 1.16(h))	* 3	Minus	***3	= 0	X $210 =	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		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	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	

* 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 number found in the appropriate box in column 1.

LIE
/TARA WASHINGTON/

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.**
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/636,674	03/03/2015	Vincent Cedric Colnot	P1987.02	3697

24739 7590 11/19/2015

CENTRAL COAST PATENT AGENCY, INC
3 HANGAR WAY SUITE D
WATSONVILLE, CA 95076

EXAMINER
SHAIKH, MOHAMMAD Z

ART UNIT	PAPER NUMBER
3694	

NOTIFICATION DATE	DELIVERY MODE
11/19/2015	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):

officeactions@CENTRALCOASTPATENT.COM
plambuth@centralcoastpatent.com

Advisory Action Before the Filing of an Appeal Brief	**Application No.** 14/636,674	**Applicant(s)** COLNOT ET AL.	
	Examiner MOHAMMAD Z. SHAIKH	**Art Unit** 3694	**AIA (First Inventor to File) Status** No

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

THE REPLY FILED 14 October 2015 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

NO NOTICE OF APPEAL FILED

1. ☒ The reply was filed after a final rejection. No Notice of Appeal has been filed. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114 if this is a utility or plant application. Note that RCEs are not permitted in design applications. The reply must be filed within one of the following time periods:
   a) ☐ The period for reply expires _____months from the mailing date of the final rejection.
   b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action; or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
   c) ☐ A prior Advisory Action was mailed more than 3 months after the mailing date of the final rejection in response to a first after-final reply filed within 2 months of the mailing date of the final rejection. The current period for reply expires months from the mailing date of *the prior Advisory Action* or SIX MONTHS from the mailing date of the final rejection, whichever is earlier.
   Examiner Note: If box 1 is checked, check either box (a), (b) or (c). ONLY CHECK BOX (b) WHEN THIS ADVISORY ACTION IS THE FIRST RESPONSE TO APPLICANT'S FIRST AFTER-FINAL REPLY WHICH WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. ONLY CHECK BOX (c) IN THE LIMITED SITUATION SET FORTH UNDER BOX (c). See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) or (c) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☒ The proposed amendments filed after a final rejection, but prior to the date of filing a brief, will not be entered because
   a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);
   b) ☐ They raise the issue of new matter (see NOTE below);
   c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
   d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.
   NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).
4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): (a) ☒ will not be entered, or (b) ☐ will be entered, and an explanation of how the new or amended claims would be rejected is provided below or appended.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.
9. ☐ The affidavit or other evidence filed after final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
10. ☐ The affidavit or other evidence filed after the date of filing the Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
11. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

12. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
13. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). _____
14. ☒ Other: See attached PTO-2323.

STATUS OF CLAIMS

15. The status of the claim(s) is (or will be) as follows:
    Claim(s) allowed: .
    Claim(s) objected to: .
    Claim(s) rejected: 1,2,7-10,15 and 16.
    Claim(s) withdrawn from consideration: .

/MOHAMMAD Z SHAIKH/
Primary Examiner, Art Unit 3694

Continuation of 12. does NOT place the application in condition for allowance because: Applicant argues: In the amendment the applicant has deleted the recitation of "personal computing device" and has had added the limitations of claim 2 to claim 1.
Examiner Response: The amendment to claim 1 has changed the scope of claim 1, taken it its entirety, and therefore a futher updated search will need to be conducted on the claim as a whole.
Examiner has shared with attorney newly found prior art reference, US 2005/0075134 to Steenstra et al.

EX1002
Askeladden, L.L.C. / Page 302 of 481

AFCP 2.0 Decision	Application No.	Applicant(s)
	14/636,674	COLNOT ET AL.
	Examiner	Art Unit
	MOHAMMAD Z. SHAIKH	3694

This is in response to the After Final Consideration Pilot request filed 14 October 2015.

1. **Improper Request** – The AFCP 2.0 request is improper for the following reason(s) and the after final amendment submitted with the request will be treated under pre-pilot procedure.

   ☐ An AFCP 2.0 request form PTO/SB/434 (or equivalent document) was not submitted.

   ☐ A non-broadening amendment to at least one independent claim was not submitted.

   ☐ A proper AFCP 2.0 request was submitted in response to the most recent final rejection.

   ☐ Other:

2. **Proper Request**

   A. After final amendment submitted with the request will not be treated under AFCP 2.0.
   The after final amendment cannot be reviewed and a search conducted within the guidelines of the pilot program.

   ☒ The after final amendment will be treated under pre-pilot procedure.

   B. Updated search and/or completed additional consideration.
   The examiner performed an updated search and/or completed additional consideration of the after final amendment within the time authorized for the pilot program. The result(s) of the updated search and/or completed additional consideration are:

   ☐ 1. All of the rejections in the most recent final Office action are overcome and a Notice of Allowance is issued herewith.

   ☐ 2. The after final amendment would not overcome all of the rejections in the most recent final Office action. See attached interview summary for further details.

   ☐ 3. The after final amendment was reviewed, and it raises a new issue(s). See attached interview summary for further details.

   ☐ 4. The after final amendment raises new issues, but would overcome all of the rejections in the most recent final Office action. A decision on determining allowability could not be made within the guidelines of the pilot. See attached interview summary for further details, including any newly discovered prior art.

   ☐ 5. Other:

   Examiner Note: Please attach an interview summary when necessary as described above.

Doc Code: A.NE.AFCP
Document Description: After Final Consideration Pilot Program Request

PTO/SB/434 (05-13)

CERTIFICATION AND REQUEST FOR CONSIDERATION UNDER THE AFTER FINAL CONSIDERATION PILOT PROGRAM 2.0

Practitioner Docket No.:	Application No.:	Filing Date:
P1987.02	14/636,674	2015-03-03
First Named Inventor:	**Title:**	
Vincent Cedric Colnot	Methods and Apparatus for Enabling Secure Network-Based Transactions	

APPLICANT HEREBY CERTIFIES THE FOLLOWING AND REQUESTS CONSIDERATION UNDER THE AFTER FINAL CONSIDERATION PILOT PROGRAM 2.0 (AFCP 2.0) OF THE ACCOMPANYING RESPONSE UNDER 37 CFR 1.116.

1. The above-identified application is (i) an original utility, plant, or design nonprovisional application filed under 35 U.S.C. 111(a) [a continuing application (*e.g.*, a continuation or divisional application) is filed under 35 U.S.C. 111(a) and is eligible under (i)], or (ii) an international application that has entered the national stage in compliance with 35 U.S.C. 371(c).
2. The above-identified application contains an outstanding final rejection.
3. Submitted herewith is a response under 37 CFR 1.116 to the outstanding final rejection. The response includes an amendment to at least one independent claim, and the amendment does not broaden the scope of the independent claim in any aspect.
4. This certification and request for consideration under AFCP 2.0 is the only AFCP 2.0 certification and request filed in response to the outstanding final rejection.
5. Applicant is willing and available to participate in any interview requested by the examiner concerning the present response.
6. This certification and request is being filed electronically using the Office's electronic filing system (EFS-Web).
7. Any fees that would be necessary consistent with current practice concerning responses after final rejection under 37 CFR 1.116, *e.g.*, extension of time fees, are being concurrently filed herewith. [There is no additional fee required to request consideration under AFCP 2.0.]
8. By filing this certification and request, applicant acknowledges the following:
   - Reissue applications and reexamination proceedings are not eligible to participate in AFCP 2.0.
   - The examiner will verify that the AFCP 2.0 submission is compliant, *i.e.*, that the requirements of the program have been met (see items 1 to 7 above). For compliant submissions:
     - The examiner will review the response under 37 CFR 1.116 to determine if additional search and/or consideration (i) is necessitated by the amendment and (ii) could be completed within the time allotted under AFCP 2.0. If additional search and/or consideration is required but cannot be completed within the allotted time, the examiner will process the submission consistent with current practice concerning responses after final rejection under 37 CFR 1.116, *e.g.*, by mailing an advisory action.
     - If the examiner determines that the amendment does not necessitate additional search and/or consideration, or if the examiner determines that additional search and/or consideration is required and could be completed within the allotted time, then the examiner will consider whether the amendment places the application in condition for allowance (after completing the additional search and/or consideration, if required). If the examiner determines that the amendment does not place the application in condition for allowance, then the examiner will contact the applicant and request an interview.
       - The interview will be conducted by the examiner, and if the examiner does not have negotiation authority, a primary examiner and/or supervisory patent examiner will also participate.
       - If the applicant declines the interview, or if the interview cannot be scheduled within ten (10) calendar days from the date that the examiner first contacts the applicant, then the examiner will proceed consistent with current practice concerning responses after final rejection under 37 CFR 1.116.

Signature	Date
/Donald R. Boys/	10/14/2015
Name (Print/Typed) Donald R. Boys	**Practitioner Registration No.** 35074

Note: *This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4(d) for signature requirements and certifications. Submit multiple forms if more than one signature is required, see below*.*

☐ * Total of _____ forms are submitted.

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.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Art Unit: 3694 Examiner: Shaikh, Mohammad Z

Confirmation No.: 3697

In Re:	Vincent Cedric Colnot et al.
Case:	P1987.02
Serial No.:	14/636,674
Filed:	March 3, 2015
Subject:	Methods and Apparatus for Enabling Secure Network-Based Transactions

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Amendment After Final under 37CFR 1.116 and After Final Consideration Program 2.0

In the Claims

All of the claims standing for examination are reproduced below with appropriate status indication.

1. (Currently amended) An apparatus comprising:

a card reader having an input interface configured to accept digital data from an output interface of a transaction card;

conversion circuitry converting the digital data to an analog modulated signal; ~~and~~

an output pin from the card reader, the output pin configured to engage in a microphone port of a ~~personal computing device or a~~ smart telephone, the conversion circuitry providing the analog modulated signal to the output pin; and

a smart telephone configured to communicate on a network, the smart telephone comprising the microphone port engaged with the output pin to receive the analog modulated signal and conversion circuitry for converting the analog modulated signal to digital data for transmission on the network.

2-6. (Canceled)

7. (Currently amended) The apparatus of claim [[2]] 1 wherein ~~the personal computing device or~~ smart telephone executes coded instructions providing two-way communication with a server hosted by a financial institution or an on-line merchant, and the two-way communication facilitates transactions by an owner of a transaction card with the financial institution or purchases by the owner of the card with an on-line merchant.

8. (Previously presented) The apparatus of claim 7 wherein the coded instructions operate to accept a card verification code (CVV), to use the CVV in the purchases or transactions, and for each transaction or purchase accomplished, a new CVV is created and stored.

9. (Currently amended) A method comprising:

receiving at a card reader having an input interface enabled to accept digital data from an output interface of a transaction card;

converting the data to an analog modulated signal by conversion circuitry; ~~and~~

providing the analog modulated signal to an output pin of the card reader, the output pin configured to engage in a microphone port of a ~~personal computing device or~~ a smart telephone;

receiving the analog modulated signal by a smart telephone enabled to communicate on a network; and

converting the analog modulated signal received, by conversion circuitry in the smart telephone, to digital data for transmission on the network .

10-14. (Canceled)

15. (Currently amended) The method of claim [[10]] 9 wherein coded instructions executing from a non-transitory medium provide two-way communication with a server hosted by a financial institution or an on-line merchant, and the two-way communication ~~facilitate~~ facilitates transactions by an owner of a transaction card with the financial institution or purchases by the owner of the transaction card with an on-line merchant.

16. (Original) The method of claim 15 wherein the coded instructions operate to accept a card verification code (CVV), to use the CVV in the purchases or transactions, and for each transaction or purchase accomplished, a new CVV is created and stored.

REMARKS

This response is to the Final Action mailed on 09/22/2015.

In the Final action the examiner rejects claim 2 under 35 USC 102 over Calnot, of record, saying:

"Colnot discloses the apparatus of claim 1. Colnot discloses further comprising a personal computing device or a smart telephone configured to communicate on a network, the personal computing device or the smart telephone comprising a microphone port engaged with the output pin to receive the analog modulated signal and conversion circuitry for converting the analog modulated signal to digital data for transmission on the network (At least: [0020] to [0022]; Fig 3).

Examiner notes that there is optional language, and therefore only the "personal computing device" limitation *is being addressed.* (Emphasis added).

Applicant asked for an after-final interview to address the rejection of claim 2, and was informed by the examiner in a voice message that the examiner ",,,does not grant after-final interviews…". The applicant accordingly has amended the claims and prepared this after final amendment to hopefully get consideration of the simple amendment that the applicant believes places the case in condition for allowance.

In the amendment the applicant has deleted the recitation of "personal computing device" and has added the limitations of claim 2 to claim 1. The additional limitations to claim 1 surely do not broaden the scope of claim 1, and the elimination of the optional language also does not broaden the scope. The optional language is broader than the specific.

The applicant respectfully urges that no limitation has been added to the claim language that could require further search or consideration. All of the limitations recited in claims 1 and 9 as amended were recited in claims before the amendment, and the

examiner's search strategy and results document posted in Public Pair indicates the telephone and its relation to other aspects and limitations was thoroughly searched prior to the Final rejection, and had to have been addressed in the making of the final rejection. The applicant refers to at least reference #s S18-19, S113, S 217-218, S220, and S252-264 in the search document.

The consideration of the more narrow claims 1 and 9 therefore should be a relatively simple operation, and require no further search.

The applicant believes independent claims 1 and 9, as amended, are patentable over the art cited and applied, and that depended claims 7, 8 and 15, 16 still standing are patentable at least as depended from a patentable claim. These claims are patentable specifically by the recitation of a card reader receiving a digital signal, converting the digital signal to a modulated analog signal, providing the modulated analog signal to a mic port of a smart telephone, and converting the modulated analog signal to a digital data for transmission on a network.

Summary

As all of the claims, as amended and argued above, have been shown to be patentable over the art cited and applied, applicant respectfully requests reconsideration and the case be passed quickly to issue.

If any fees are due beyond fees paid with this amendment, authorization is made to deduct those fees from deposit account 50-0534. If any time extension is needed beyond any extension requested with this amendment, such extension is hereby requested.

Respectfully Submitted,
Vincent Cedric Colnot et al.

By /Donald R. Boys/
Donald R. Boys
Reg. No. 35,074

Central Coast Patent Agency, Inc.
3 Hangar Way, Suite D
Watsonville, CA 95076
(831) 768-1755

Electronic Acknowledgement Receipt

EFS ID:	23784591
Application Number:	14636674
International Application Number:	
Confirmation Number:	3697
Title of Invention:	Methods and Apparatus for Enabling Secure Network-Based Transactions
First Named Inventor/Applicant Name:	Vincent Cedric Colnot
Customer Number:	24739
Filer:	Donald Rex Boys/Sheri Beasley
Filer Authorized By:	Donald Rex Boys
Attorney Docket Number:	P1987.02
Receipt Date:	14-OCT-2015
Filing Date:	03-MAR-2015
Time Stamp:	16:33:46
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	After Final Consideration Program Request	sb_434PilotProgramafterfinal.pdf	227991 20d88bc8885307aec82ad76967fcfaa4ada48cd0	no	2

Warnings:	
Information:	

2	Response After Final Action	1987_02oar2.pdf	22845 7902c5ef4ded25b14c33411abf577ab7459222e8	no	6

Warnings:	
Information:	
Total Files Size (in bytes):	250836

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.

PTO/SB/06 (09-11)
Approved for use through 1/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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.

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 14/636,674	Filing Date 03/03/2015	☐ To be Mailed

ENTITY: ☐ LARGE ☒ SMALL ☐ MICRO

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) 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), (i), 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 $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =	
☐ 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

AMENDMENT	10/14/2015	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	* 6	Minus	** 20	= 0	X $40 =	0
	Independent (37 CFR 1.16(h))	* 2	Minus	***3	= 0	X $210 =	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		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	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	

* 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 number found in the appropriate box in column 1.

LIE
/ERIC DANTZLER/

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.

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

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/636,674	03/03/2015	Vincent Cedric Colnot	P1987.02	3697

24739 7590 09/22/2015

CENTRAL COAST PATENT AGENCY, INC
3 HANGAR WAY SUITE D
WATSONVILLE, CA 95076

EXAMINER
SHAIKH, MOHAMMAD Z

ART UNIT	PAPER NUMBER
3694	

NOTIFICATION DATE	DELIVERY MODE
09/22/2015	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):

officeactions@CENTRALCOASTPATENT.COM
plambuth@centralcoastpatent.com

Office Action Summary	Application No. 14/636,674	Applicant(s) COLNOT ET AL.	
	Examiner MOHAMMAD Z. SHAIKH	Art Unit 3694	AIA (First Inventor to File) Status No

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

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *7/8/15*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ 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.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5)☒ Claim(s) *1,2,7-10,15 and 16* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-2, 7-10, 15-16* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, 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.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ 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)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date _____.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

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

DETAILED ACTION

2. This Office action is in response to an amendment received on 7/8/15 for patent application 14/636,674.

Status of Claims

3. Claims 1-2, 7-10, 15 are amended.

4. Claims 3-6, 11-14 are cancelled.

5. Claims 1-2, 7-10, 15-16 are pending.

RESPONSE TO ARGUMENTS

Applicant argues:

Regarding the 102 rejection over KR 20030076045, of record, the applicant has studied the reference and determined that the card reader in the reference does not read data and provide the data to a computerized device through a microphone port. Moreover, the examiner, in applicant-initiated interview has indicated he understands that the reference does not teach the limitation. The applicant therefore believes the claims as amended above are patentable over the art cited and applied.

Examiner Response:

2. Applicant's arguments with respect to claims 1-16 have been considered but are moot because the arguments do not apply to any of the references being used in the current rejection.

Claim Rejections- 35 U.S.C § 112

6. The 35 U.S.C 112 2nd rejections for claims 4, 12 are hereby withdrawn.

Claim Rejections- 35 U.S.C § 102

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.

> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-2, 9-10 are being rejected under 35 U.S.C 102(b) as being anticipated by 2004/0093436 to Colnot.

Regarding claim 1, Colnot discloses an apparatus comprising:

a card reader having an input interface configured to accept digital data from an output interface of a transaction card (At least: [0005], claim 2, claim 8)

conversion circuitry converting the digital data to an analog modulated signal (At least: [0020] to [0022], claim 8, claim 2, claim 12) an output pin from the card reader, the output pin adapted configured to engage in a microphone port of a personal computing device (At least: [0020] to [0022]) **or** a smart telephone, the conversion circuitry providing the analog modulated signal to the output pin (At least: [0020] to [0022];Fig 3).

Regarding claim 2, Colnot discloses the apparatus of claim 1.

Colnot discloses further comprising a personal computing device or a smart telephone configured to communicate on a network, the personal computing device or the smart telephone comprising a microphone port engaged with the output pin to receive the analog modulated signal and conversion circuitry for converting the analog modulated signal to digital data for transmission on the network (At least: [0020] to [0022]; Fig 3). Examiner notes that there is optional language, and therefore only the *"personal computing device"* limitation is being addressed.

Regarding claim 9,Colnot discloses a method comprising:

receiving digital data at an input interface of a card reader from an output interface of a transaction card (At least: [0005], claim 2, claim 8);

converting the digital data to an analog modulated signal by conversion circuitry (At least: [0020] to [0022], claim 8, claim 2, claim 12); and

providing the analog modulated signal by to an output pin of the card reader, the output pin configured to engage in a microphone port of a personal computing device (At least: [0020] to [0022], Fig 3) or a smart telephone.
Examiner notes that there is optional language, and therefore only the *"personal computing device"* limitation is being addressed.

Claim 10 is being rejected using the same rationale as claim 2.

Claim Rejections- 35 U.S.C 103

9. The following is a quotation of pre-AIA 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claims 7,15 are being rejected under 35 U.S.C 103(a) as being unpatentable over Colnot in view of US Patent 6,607,136 to Atsmon et al, herein Atsmon.

Regarding claim 7, Colnot discloses the apparatus of claim 2.

However Colnot does not disclose wherein the personal computing device or smart telephone executes coded instructions providing two-way communication with a server hosted by a financial institution or an on-line merchant, and the two-way communication facilitates transactions by an owner of transaction card with the financial institution or purchases by the owner of the card with an on-line merchant.

Atsmon wherein the personal computing device (At least: Fig 45: 451) or smart telephone executes coded instructions providing two-way communication with a server hosted by a financial institution or an on-line merchant, and the two-way communication facilitates transactions by an owner of transaction card with the financial institution or purchases by the owner of the card with an on-line merchant (At least: Fig 45: 451, 450, 452, 453).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Colnot's invention to include wherein the personal computing device

or smart telephone executes coded instructions providing two-way communication with a server hosted by a financial institution or an on-line merchant, and the two-way communication facilitates transactions by an owner of transaction card with the financial institution or purchases by the owner of the card with an on-line merchant.
One of ordinary skill in the art would have been motivated to include wherein the personal computing device or smart telephone executes coded instructions providing two-way communication with a server hosted by a financial institution or an on-line merchant, and the two-way communication facilitates transactions by an owner of transaction card with the financial institution or purchases by the owner of the card with an on-line merchant in order to ensure that the online transaction is processed in an efficient manner.

Claim 15 is being rejected using the same rationale as claim 7.

10. Claims 8,16 are being rejected under 35 U.S.C 103(a) as being unpatentable over Colnot in view of Atsmon and further in view of US Patent 7,761,374 to Sahota et al, herein Sahota.

Regarding claim 8, Conlot discloses the apparatus of claim 7. However Colnot does not disclose wherein the coded instructions operate to accept a card verification code (CVV), to use the CVV in the purchases or transactions, and for each transaction or purchase accomplished, a new CVV is created and stored.
Sahota discloses wherein the coded instructions operate to accept a card verification code (CVV) to use the CVV in the purchases or transactions, and for each transaction or purchase accomplished, a new CVV is created (At least: Fig 3; Fig 6; Fig 7).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Colnot's invention to include wherein the coded instructions operate to accept a card verification code (CVV), to use the CVV in the purchases or transactions, and for each transaction or purchase accomplished, a new CVV is created.

One of ordinary skill in the art would have been motivated to include wherein the coded instructions operate to accept a card verification code (CVV), to use the CVV in the purchases or transactions, and for each transaction or purchase accomplished, a new CVV is created in order to ensure that the security of the online transactions are maintained.

Claim 16 is being rejected using the same rationale as claim 8.

CONCLUSION

1. 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 MOHAMMAD Z. SHAIKH whose telephone number is (571)270-3444. The examiner can normally be reached on Monday-Thursday (9:00-5:30).

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

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.

/MOHAMMAD Z SHAIKH/
Primary Examiner, Art Unit 3694

9/15/2015

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Notice of References Cited	Application/Control No. 14/636,674	Applicant(s)/Patent Under Reexamination COLNOT ET AL.	
	Examiner MOHAMMAD Z. SHAIKH	Art Unit 3694	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2004/0093436	05-2004	Colnot, Vincent Cedric	710/001
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	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.

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14636674	COLNOT ET AL.
	Examiner	Art Unit
	MOHAMMAD Z SHAIKH	3694

CPC- SEARCHED		
Symbol	Date	Examiner
G06Q 20/3272	5/14/2015	/MZS/
G06Q 20/3278	5/14/2015	/MZS/
G06K19/07	9/15/2015	/MZS/
H04M2250/14	9/15/2015	/MZS/
G06Q20/34	9/15/2015	/MZS.
G06Q20/123	9/15/2015	/MZS/
G06Q20/341	9/15/2015	/MZS/

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner

SEARCH NOTES		
Search Notes	Date	Examiner
EAST	5/14/2015	/MZS/
EAST	9/15/2015	/MZS/

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	77	card same reader same (audio or sound or mic or microphone) same credit same analog same digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/05 13:53
S2	89	card same reader same (audio or sound or mic or microphone) same credit same analog same digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 13:53
S3	0	card same reader same (audio or sound or mic or microphone) same credit same analog same digital same (cvv or "credit verification value")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 13:53
S4	0	card same reader same (audio or sound or mic or microphone) same credit same analog same digital and (cvv or "credit verification value")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 13:53
S5	581	"l89" and (cvv or "credit verification value" or "security code" or code or pin or alias)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/05 13:54
S6	78	S2 and (cvv or "credit verification value" or "security code" or code or pin or alias)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/05 13:54
S7	1	"sound pass" same credit same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/05 14:00
S8	5	ohva and microphone	US-PGPUB;	OR	OFF	2015/05/05

			USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			14:01
S9	34	("2004/0093496").URPN.	USPAT	OR	OFF	2015/05/05 14:03
S10	34	S9 and transaction and card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/05 14:03
S11	6607	(sound near2 card) same (mic or microphone or speaker) same (transaction or smart or debit or card or "stored value" or atm) same card same (reader or scanner or scan or read or reading)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:13
S12	1027	(sound near2 card) same (mic or microphone or speaker) same (transaction or smart or debit or card or "stored value" or atm) same card same (reader or scanner or scan or read or reading) same analog same digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:13
S13	63	(sound near2 card) same (mic or microphone or speaker) same (transaction or smart or debit or card or "stored value" or atm) same card same (reader or scanner or scan or read or reading) same analog same digital same signal	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:13
S14	2	(sound near2 card) same (mic or microphone or speaker) same ((transaction or smart or debit or card or "stored value" or atm) near2 card) same (reader or scanner or scan or read or reading) same analog same digital same signal	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:18
S15	405	(sound near2 card) same (mic or microphone or speaker) same ((transaction or smart or debit or card or "stored value" or atm) near2 card) same (reader or scanner or scan or read or reading) same analog same digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:19
S16	1	(sound near2 card) same (mic or microphone or speaker) same ((transaction or smart or debit or "stored value" or atm) near2 card) same (reader or scanner or scan or read or reading) same analog same digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:19
S17	2	(sound near2 card) same (mic or microphone or speaker) same ((transaction or smart or debit or "stored value" or atm) near2 card)	US-PGPUB; USPAT; USOCR; FPRS; EPO;	OR	ON	2015/05/05 14:19

		same (reader or scanner or scan or read or reading) same converter	JPO; DERWENT; IBM_TDB			
S18	34	(computer or pda or table or phone or pda or device) same (mic or microphone or speaker) same ((transaction or smart or debit or "stored value" or atm) near2 card) same (reader or scanner or scan or read or reading) same converter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:21
S19	81	(computer or pda or table or phone or pda or device) same (mic or microphone or speaker) same (transaction or smart or debit or "stored value" or atm) same card same (reader or scanner or scan or read or reading) same converter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:23
S20	144	"Mag Tek"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/05 14:27
S21	1	S20 and (mic or microphone or speaker) same (transaction or smart or debit or "stored value" or atm) same card same (reader or scanner or scan or read or reading) same converter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:28
S22	1	S20 and (mic or microphone or speaker) same (transaction or smart or debit or "stored value" or atm) same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:28
S23	1	S20 and (mic or microphone or speaker) same (transaction or smart or debit or "stored value" or atm)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:28
S24	1	S20 and ((mic or microphone or speaker) same (transaction or smart or debit or "stored value" or atm))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:29
S25	678	audio same jack same card same reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/05 14:30
S26	205	audio same jack same card same reader same (financial or debit or	US-PGPUB; USPAT;	OR	OFF	2015/05/05 14:31

		transaction or credit or atm)	USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S27	3	audio same jack same card same reader same (financial or debit or transaction or credit or atm) same converter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:31
S28	231	audio same jack same card same reader same (financial or debit or transaction or credit or atm)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:31
S29	20	audio same jack same card same reader same (financial or debit or transaction or credit or atm) same pin	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:31
S30	7	S29 AND ((G06Q20/3272 OR G06Q20/3278).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:38
S31	4	"20040093496"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/05 14:38
S32	3	"6708892".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 16:54
S33	1	"6708892".pn. and network	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 16:55
S34	0	"6708892".pn. and sequence	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 16:57

S35	0	"6708892".pn. and chip	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 16:57
S36	95	electronic same chip same digital same memory same amount same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 16:58
S37	28	electronic same chip same digital same memory same amount same card same (credit or debit or atm)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 16:59
S38	2	"6641050".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 17:14
S39	1	"6641050".pn. and bit	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 17:14
S40	179	("6641050").URPN.	USPAT	OR	OFF	2015/05/12 17:16
S41	25	S40 and memory and chip and bit and card and (value or money)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 17:19
S42	20	electronic same chip same digital same memory same amount same card same analog same digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 17:21
S43	0	card near2 chip same credit same bit same analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 17:23
S44	0	card near7 chip same credit same bit same analog	US-PGPUB; USPAT; USOCR;	OR	OFF	2015/05/12 17:23

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S45	2	card same chip same credit same bit same analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 17:23
S46	255	card same chip same credit same bit	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 17:24
S47	76	card same chip same credit same bit same value	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 17:24
S48	28	card same chip same credit same bit same value same (conversion or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 17:24
S49	9	card same integrated same circuit same credit same bit same value same (conversion or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 17:25
S50	16	integrated same circuit same credit same bit same value same (conversion or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 17:30
S51	8	"integrated circuit" same credit same card same digital same converter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 17:34
S52	164	("5920628").URPN.	USPAT	OR	OFF	2015/05/12 17:39
S53	1	"7761374".pn. and (integrated or chip)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	OFF	2015/05/12 17:45

			IBM_TDB			
S54	4	"5546462".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 17:47
S55	3	"6708892".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 17:49
S56	1	"6708892".pn. and (integrated or circuit or chip)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 17:50
S57	1	"7761374".pn. and (digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 17:50
S58	1	"6708892".pn. and (integrated or circuit or chip)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 17:52
S59	2	"6708892".pn. and smart	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 17:53
S60	4	"6607136".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 08:54
S61	2	"7334735".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 09:02
S62	1	"7334735".pn. and (card and converter)	US-PGPUB; USPAT; USOCR; FPRS; EPO;	OR	OFF	2015/05/13 09:03

			JPO; DERWENT; IBM_TDB			
S63	1	"7334735".pn. and (card and digital and (convert or converting or converter)) and analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 09:06
S64	1	"7334735".pn. and (digital and (convert or converting or converter)) and analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 09:06
S65	1	"6708892".pn. and (digital and (convert or converting or converter)) and analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 09:08
S66	163	(digital near2 analog) same converter same (credit or transaction or atm or debit) same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 09:16
S67	292	(digital near2 analog) same converter same (credit or transaction or atm or debit) same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 09:16
S68	79	(digital near2 analog) same converter same (credit or transaction or atm or debit) same card same (sound or audio or mic or microphone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 09:17
S69	42	(digital near2 analog) same converter same ((credit or transaction or atm or debit) near3 card) same (sound or audio or mic or microphone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 09:20
S71	2	"7620759".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 09:37
S72	2	"6481623".pn.	US-PGPUB; USPAT;	OR	OFF	2015/05/13 09:40

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S73	2	"6481623".pn. and (mic or microphone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 09:48
S74	3	"6708892".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 09:50
S75	1	"6708892".pn. and reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 09:51
S76	1	"6708892".pn. and reader and (mic or microphone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 10:32
S77	1	"6607136".pn. and (mic or microphone) and computer and analog and signal and (convert or converting or converter)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 10:39
S78	1	"6607136".pn. and (mic or microphone) and computer and analog and signal and (convert or converting or converter) and reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 10:44
S79	1	"7334735".pn. and (mic or microphone) and computer and analog and signal and (convert or converting or converter) and reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 10:46
S80	15	("6708892").URPN.	USPAT	OR	OFF	2015/05/13 10:58
S81	5	"7118027".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	OFF	2015/05/13 11:06

			DERWENT; IBM_TDB			
S82	2	"5763862".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:07
S83	2	"6481623".pn. and (mic or microphone) and reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:08
S84	117	("6481623").URPN.	USPAT	OR	OFF	2015/05/13 11:10
S85	2	"7225994".pn. and (mic or microphone) and reader and card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:17
S86	106	("7225994").URPN.	USPAT	OR	OFF	2015/05/13 11:18
S87	1	"20050263590" and (mic or microphone) and reader and card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:21
S88	491360	(computer or device) same (mic or microphone) sam reader same (Smart near2 card) same (convert or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:24
S89	405	(computer or device) same (mic or microphone) same reader same (Smart near2 card) same (convert or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:25
S90	504	(computer or device) same (mic or microphone) same reader same (Smart near2 card) same (convert or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 11:25
S91	127	(computer or device) near5 (mic or microphone) same reader same (Smart near2 card) same (convert or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	ON	2015/05/13 11:25

			DERWENT; IBM_TDB			
S92	122	(computer or device) near5 (mic or microphone) same reader same (credit near2 card) same (convert or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 11:29
S93	3	(computer or device) near5 (mic or microphone) near5 reader same (credit near2 card) same (convert or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 11:29
S94	5	(computer or device) near5 (mic or microphone) near7 reader same (credit near2 card) same (convert or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 11:30
S95	457	(computer or device) near5 (mic or microphone)same (card near2 reader) same (convert or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 11:31
S96	93	(computer or device) near5 (mic or microphone)near5 (card near2 reader) same (convert or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 11:31
S97	106	(computer or device) near5 (mic or microphone)same (card near2 reader) same (convert or converter or digital or analog) same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 11:31
S98	251	"card reader" same audio same (mic or microphone) same computer	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:39
S99	3	"card reader" same audio same (mic or microphone) same computer same converter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:40
S100	98	"card reader" same audio same (mic or microphone) same computer same (analog or digital)	US-PGPUB; USPAT; USOCR;	OR	OFF	2015/05/13 11:40

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S101	54	"reader" same audio same (mic or microphone) same computer same (analog or digital) same (credit or debit or smart)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:44
S102	44	"reader" same sound same (mic or microphone) same computer same (analog or digital) same (credit or debit or smart)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:46
S103	2	"5799036".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:53
S104	0	"5799036".pn. and reader and microphone	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:54
S105	1	"5799036".pn. and card and microphone	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:54
S106	94	("5799036").URPN.	USPAT	OR	OFF	2015/05/13 11:56
S107	1	S63 and "Card reader"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:56
S108	0	S106 and "Card reader"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:57
S109	10	S106 and "reader"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	OFF	2015/05/13 11:57

			IBM_TDB			
S110	1	"card reader" same device same microphone same transaction same ("a/d" or "analog to digital" or "d/a" or "digital to analog")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:58
S111	1	"reader" same device same microphone same transaction same ("a/d" or "analog to digital" or "d/a" or "digital to analog")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:59
S112	10	"card reader" same device same microphone same ("a/d" or "analog to digital" or "d/a" or "digital to analog")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:59
S113	5	"card reader" same (phone or computer or table or pda) same microphone same ("a/d" or "analog to digital" or "d/a" or "digital to analog")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 12:00
S114	6	"7810729".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 12:03
S115	7	"20020030871"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 12:07
S116	2	"20020030871" and converter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 12:07
S117	0	"20020030871" and digital and microphone and reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 12:08
S118	4	"7918394".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO;	OR	OFF	2015/05/13 12:09

			JPO; DERWENT; IBM_TDB			
S119	1	"6481623".pn. and network	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 16:21
S120	0	"6481623".pn. and network	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:21
S121	0	"6481623".pn. and internet	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:21
S122	0	"6481623".pn. and lan	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:21
S123	0	"6481623".pn. and wan	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:22
S124	1	"6481623".pn. and line	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:22
S125	1	"6481623".pn. and bit	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:24
S126	1	"6481623".pn. and "0"	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:24
S127	1	"6481623".pn. and "0" and (circuit or chip)	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:26
S128	1	"6481623".pn. and "128"	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:29
S129	1	"6481623".pn. and "40"	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:30
S130	1	"6481623".pn. and S128	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:30
S131	22	((digital to analog) or (a/d)) same converter same credit same data same reader same (microphone or audio or sound)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/14 10:11
S132	22	((digital to analog) or (d/a)) same converter same credit same data same reader same (microphone or audio or sound)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/14 10:13
S133	297	((digital to analog) or (d/a)) same credit same data same reader same (microphone or audio or sound)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/14 10:14
S134	297	((digital to analog) or (d/a)) same credit same data same reader same (microphone or audio or sound) same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	ON	2015/05/14 10:14

			DERWENT; IBM_TDB			
S135	2	(("digital to analog") or ("d/a")) same credit same data same reader same (microphone or audio or sound) same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/14 10:16
S136	2	(("digital to analog") or ("d/a")) same credit same data same reader same (microphone or audio or sound)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/14 10:16
S137	2	(("digital to analog") or ("d/a")) same credit same data same (scanner or reader) same (mic or microphone or audio or sound)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/14 10:17
S138	1	(("digital to analog") or ("d/a")) same transaction same data same (scanner or reader) same (mic or microphone or audio or sound)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/14 10:17
S139	24	(convert or converting or conversion) same (("credit card") near2 (data or information)) same analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/14 10:47
S140	5	"20030076045"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/14 11:11
S141	3	"KR 20030076045"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/14 11:12
S142	0	"blue toot typed portable credit card reader"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/14 11:17
S143	3	"blue tooth typed portable credit card reader"	US-PGPUB; USPAT; USOCR;	OR	OFF	2015/05/14 11:17

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S144	4	"6607136".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/14 11:39
S145	2	"7761374".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/14 11:42
S146	14	"blue tooth" near2 "credit card"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/14 12:09
S147	14	"blue tooth" near2 "credit card"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/14 12:09
S148	0	sound near2 key same microphone same credit same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:02
S149	133	sound same key same microphone same credit same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:02
S150	54	sound same key same microphone same credit same card same reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:02
S151	147	sound same microphone same credit same card same reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:03
S152	54	sound same microphone same credit	US-PGPUB;	OR	ON	2015/06/16

		same card same reader same key	USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			11:03
S153	246	microphone same credit same card same reader same audio	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:13
S154	215	microphone same credit near3 card same reader same audio	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:13
S155	1946	microphone same credit near3 card ena3reader same audio	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:14
S156	83	microphone same credit near3 card near3 reader same audio	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:14
S157	3	microphone same credit near3 card near3 reader near4 audio	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:14
S158	190	(headphones or mic or speaker) same credit near3 card near3 reader same audio	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:20
S159	18	(headphones or mic or speaker) same credit near3 card near3 reader near5 audio	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:21
S160	5	(headphones or mic or speaker) same credit near3 card near3 reader same audio same (digital) same analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2015/06/16 11:21

			IBM_TDB			
S161	7	(headphones or mic or speaker) same credit near3 card same reader same audio same (digital) same analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:22
S162	7	(headphones or mic or speaker) same credit same card same reader same audio same (digital) same analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:22
S163	86	(headphones or mic or speaker) same (debit or transaction or gift or prepaid or atm or credit) same card same reader same audio same (digital) same analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/16 11:23
S164	78434	(system same "Computer readable medium").clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/06/16 12:21
S165	2584	S164 and 705/35-45.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/06/16 12:22
S166	9498	(system near3 "Computer readable medium").clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/06/16 12:22
S167	1	"US 20150178719"	US-PGPUB; USPAT; USOCR; DERWENT	OR	OFF	2015/07/07 11:19
S168	0	"G06 20/34" AND PAYMENT AND READER	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 11:26
S169	0	"G06 20/34" AND PAYMENT	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 11:26

S170	0	"G06 20/34"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/07/07 11:26
S171	11	"G06Q 20/34" AND READER	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/07/07 11:27
S172	3	"G06Q 20/34" AND MICROPHONE	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/07/07 11:31
S173	26	"G06Q 20/40" AND MICROPHONE	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/07/07 11:32
S174	94	("5799036").URPN.	USPAT	OR	OFF	2015/07/07 12:39
S175	1252	(converter or conversion) same signal same card same data same (mic or microphone or speaker)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/07/07 12:44
S176	55	(converter or conversion) same signal same card same data same (mic or microphone or speaker) same (credit or debit or transaction or debit or gift or "store value card")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/07/07 12:45
S177	68	(digital and analog) same signal same card same data same (mic or microphone or speaker) same (credit or debit or transaction or debit or gift or "store value card")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/07/07 12:49
S178	11	("2004/0026506").URPN.	USPAT	OR	OFF	2015/07/07 12:54
S179	1736	(convert or converting or conversion) same credit same card same data	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 12:57

S180	344	(convert or converting or conversion) same credit same card same data same reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 12:57
S181	70	(convert or converting or conversion) same credit same card same data same reader same (mic or speaker or microphone or "Recording device")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 12:57
S182	143	(convert or converting or conversion) same credit same card same data same reader same (mic or speaker or microphone or "Recording device")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/07/07 12:57
S183	14	"9003508".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 14:33
S184	2	"20050276270"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 17:50
S185	1	"20050276270" and digital and microphone and reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 17:50
S186	10574	digital and microphone and reader and modulation	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 17:53
S187	2377	digital and microphone and reader and modulation and "credit card"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 17:54
S188	1982	digital and microphone and reader and modulation and "credit card" and analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	OFF	2015/07/07 17:54

			DERWENT; IBM_TDB			
S189	869	digital same microphone and reader and modulation and "credit card" and analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 17:54
S190	62	digital same microphone same reader and modulation and "credit card" and analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 17:54
S191	212	digital same microphone same reader and modulation and "card" and analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 17:57
S192	173	digital same microphone same reader and modulation and "card" and analog and (converter or conversion or converting)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 17:57
S193	63	digital same microphone same reader and modulation and "card" and analog and (converter or conversion or converting) and (transaction or credit or debit or atme)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 17:58
S194	66	digital same microphone same reader and modulation and "card" and analog and (converter or conversion or converting) and (transaction or credit or debit or atm)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/07/07 17:59
S195	103	digital same microphone same reader and modulation and "card" and analog and (converter or conversion or converting) and (transaction or credit or debit or atm)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/07/07 17:59
S196	42	personal near2 secure near2 information near2 device	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 10:29
S197	47	personal near2 secure near2 information near2 device	US-PGPUB; USPAT; USOCR;	OR	ON	2015/09/10 10:30

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S198	17	S197 and (mic or microphone or speaker or audio)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 10:34
S199	0	"reader for integrated circuit card used as a e.g. bank card, credit card"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 10:43
S200	0	"reader for integrated circuit card used as a e.g. bank card, credit card"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 10:43
S201	32	reader same "integrated circuit card" same bank same card same (mic or microphone or speaker or audio)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 10:44
S202	0	reader same "integrated circuit card" same bank same card same (mic or microphone or speaker or audio) same (converter or conversion or converting)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 10:44
S203	28	reader same "integrated circuit card" same bank same card same (mic or microphone or speaker or audio) and (converter or conversion or converting)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 10:44
S204	1	acoustic same transducer same earphone same reader same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 10:46
S205	1	acoustic same transducer same earphone same reader same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 10:47
S206	1	acoustic same (converter or	US-PGPUB;	OR	ON	2015/09/10

		conversion or converting) same earphone same reader same card	USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			10:48
S207	332	(audio or sound or acoustic) same (converter or conversion or converting) same (mic or microphone or speaker or earphone) same reader same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 10:48
S208	23	(audio or sound or acoustic) same (converter or conversion or converting) same (mic or microphone or speaker or earphone) same reader same card same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 10:49
S209	5	"20120052910"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 10:56
S210	2	"7896248".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 10:57
S211	0	mobile same magnetice same reader same (audio or microphone or sound or acoustic or mic or speaker or earphone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 11:04
S212	997	mobile same magnetic same reader same (audio or microphone or sound or acoustic or mic or speaker or earphone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 11:04
S213	29	mobile same magnetic same reader same (audio or microphone or sound or acoustic or mic or speaker or earphone) same pin	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 11:04
S214	162	mobile same card same reader same (audio or microphone or sound or acoustic or mic or speaker or earphone) same pin	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2015/09/10 11:08

			IBM_TDB			
S215	103	mobile same card same reader same (audio or microphone or sound or acoustic or mic or speaker or earphone) same pin same (analog or digital)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 11:08
S216	77	mobile same card same reader same (audio or microphone or sound or acoustic or mic or speaker or earphone) same transaction same (analog or digital)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 11:11
S217	370	(phone or device or pda or tablet or laptop or computer) same card same reader same (audio or microphone or sound or acoustic or mic or speaker or earphone) same transaction same (analog or digital)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 11:12
S218	455	(phone or device or pda or tablet or laptop or computer) same card same reader same (audio or microphone or sound or acoustic or mic or speaker or earphone) same (convert or converting or conversion) same (analog or digital)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 11:13
S219	95	(phone or device or pda or tablet or laptop or computer) same card same reader same (audio or microphone or sound or acoustic or mic or speaker or earphone) same (convert or converting or conversion) same (analog or digital) same pin	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 11:13
S220	90	(phone or device or pda or tablet or laptop or computer) same card same reader same (audio or microphone or sound or acoustic or mic or speaker or earphone) same (convert or converting or conversion) same (analog or digital) same (output) same pin	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 11:14
S221	6	output same (plug or pin) same jack same (audio or speaker or mic or microphone or headset or earphone) same analog same digital same reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 11:17
S222	39	output same (plug or pin) same jack same (audio or speaker or mic or microphone or headset or earphone) same analog same digital same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 11:20
S223	0	output same (plug or pin) same jack same (audio or speaker or mic or	US-PGPUB; USPAT;	OR	ON	2015/09/10 11:25

		microphone or headset or earphone) same analog same digital same transaction	USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S224	26	output same (plug or pin or jack) same (audio or speaker or mic or microphone or headset or earphone) same analog same digital same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 11:25
S225	7	"20020030871"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 12:46
S226	3	"20050247787"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 12:51
S227	8	"20040093436"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 12:59
S228	2	"6481623".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 13:00
S229	122	("6481623").URPN.	USPAT	OR	OFF	2015/09/10 13:03
S230	8	"20040093436"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 13:11
S231	3	("2004/0093436").URPN.	USPAT	OR	OFF	2015/09/10 13:11
S232	36	(modem or modulation or demodulation) same reader same card same analog same digital same smart	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 13:14
S233	15	(modem or modulation or demodulation) same reader same	US-PGPUB; USPAT;	OR	ON	2015/09/10 13:14

		card same analog same digital same smart same (plug or jack or port) same (audio or sound or acoustic)	USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S234	8	"20020091633"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 14:54
S235	16	("2002/0091633").URPN.	USPAT	OR	OFF	2015/09/10 14:57
S236	0	"20020091633" and analog	USPAT	OR	OFF	2015/09/10 14:59
S237	0	"20020091633" and analog	USPAT	OR	ON	2015/09/10 15:00
S238	0	"20020091633" and convert	USPAT	OR	ON	2015/09/10 15:00
S239	1	"20020091633" and analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:00
S240	611	card same reader same digital same analog same credit	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:02
S241	33	card same reader same digital same analog same credit same converter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:02
S242	39	card same reader same digital same analog same transaction same converter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:04
S243	10	card same reader same ("a/d" or "d/a") same transaction same converter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:05
S244	1	card same reader same ("digital to analog" or "d/a") same transaction same converter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	ON	2015/09/10 15:07

			DERWENT; IBM_TDB			
S245	2	card same reader same ("digital to analog" or "d/a") same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:08
S246	27	card same reader same ("digital to analog" or "d/a") same audio	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:08
S247	3	card same reader same ("digital to analog" or "d/a") same payment	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:10
S248	0	card same reader same ("digital to analog" or "d/a") same financial	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:10
S249	0	card same reader same ("digital to analog" or "d/a") same merchant	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:10
S250	2	transaction same card same reader same ("digital to analog" or "d/a")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:11
S251	96	card same reader same ("digital to analog" or "d/a")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:11
S252	3	"20040093436" and phone	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 15:29
S253	2615	(smart near2 phone) same microphone same (analog or digital or d/a or "digital to analog")	US-PGPUB; USPAT; USOCR;	OR	ON	2015/09/10 15:30

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S254	40	(smart near2 phone) same microphone same (analog or digital or d/a or "digital to analog") same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:31
S255	428	(smart near2 phone) same microphone same (analog or digital or d/a or "digital to analog") same (converter or conversion or converting)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:32
S256	22	(smart near2 phone) same microphone near3 (analog or digital or d/a or "digital to analog") same (converter or conversion or converting)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:33
S257	45	(smart near2 phone) same microphone near5 (analog or digital or d/a or "digital to analog") same (converter or conversion or converting)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:33
S258	4944	(phone or pda or tablet) same microphone same (analog or digital or d/a or "digital to analog") same (converter or conversion or converting)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:34
S259	37	(phone or pda or tablet) same microphone same (analog or digital or d/a or "digital to analog") same (converter or conversion or converting) same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:35
S260	442	(phone or pda or tablet) same microphone same (analog or digital or d/a or "digital to analog") same (converter or conversion or converting) same smart	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:37
S261	27	(phone or pda or tablet) same microphone same (analog or digital or d/a or "digital to analog") same (converter or conversion or converting) same smart same reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:37
S262	116	(phone or pda or tablet) same	US-PGPUB;	OR	ON	2015/09/10

		microphone same (analog or digital or d/a or "digital to analog") same (converter or conversion or converting) same reader	USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			15:38
S263	5920	(phone or pda or tablet) same (mic or speaker or microphone or headphone) same (analog or digital or d/a or "digital to analog") same (converter or conversion or converting)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:42
S264	758	(phone or pda or tablet) same (mic or speaker or microphone or headphone) same (analog or digital or d/a or "digital to analog") same (converter or conversion or converting) same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 15:42
S266	11	"2002030871"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 16:04
S267	11	"2002030871"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 16:04
S268	7	"20020030871"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 16:05
S269	3	"20050247787"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 16:05
S270	6	"7810729".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/10 16:06
S271	6	"7810729".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2015/09/10 16:06

			IBM_TDB			
S272	62	("20020002507" | "20020030871" | "20040087339" | "20040204074" | "20050247787" | "20070250623" | "20080059370" | "20080059375" | "4845740" | "5764742" | "5850599" | "6129277" | "6481623" | "6579728" | "7252232").PN. OR ("7810729").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2015/09/10 16:06
S273	1365880	pda with microphone with digital or audio	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 16:38
S274	689	pda with microphone with digital same audio	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 16:38
S275	546	pda with microphone with digital with audio	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 16:38
S276	5	pda with microphone with digital with audio same conversion	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 16:39
S277	7	pda with microphone with digital same audio same conversion	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 16:41
S278	10	pda same microphone with digital same audio same conversion	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 16:44
S279	161	pda same microphone same digital same audio same conversion	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/10 16:44
S280	10	pda same microphone same digital same audio same conversion same card	US-PGPUB; USPAT; USOCR;	OR	ON	2015/09/10 16:44

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S281	8	"20040093436"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/11 08:59
S282	3	"20040093436" and reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/11 09:00
S283	377	"colnot"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/11 15:38
S284	55	"colnot" and analog and digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/11 15:38
S285	64	"colnot" and analog and digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/11 15:39
S286	14	"9003508".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/09/11 15:46
S287	3	"US 7620759"	US-PGPUB; USPAT; USOCR; DERWENT	OR	OFF	2015/09/11 15:49
S288	3	analog same digital same sound same generator same card same reader same (mic or microphone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/11 15:56
S289	3	analog same digital same (Acoustic or sound) same generator same card same reader same (mic or microphone)	US-PGPUB; USPAT; USOCR; FPRS; EPO;	OR	ON	2015/09/11 15:56

			JPO; DERWENT; IBM_TDB			
S290	90	analog same digital same (Acoustic or sound) same (device or fob or ring or key) same card same reader same (mic or microphone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/11 15:57
S291	3	analog same digital same (Acoustic or sound) same (device or fob or ring or key) same card same reader same (mic or microphone) same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/11 15:57
S292	0	analog same digital same (Acoustic or sound) same (device or fob or ring or key) same card same reader same (mic or microphone) same (jack)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/11 15:57
S293	62	analog same digital same (Acoustic or sound) same (device or fob or ring or key) same card same reader same (mic or microphone) same (jack or output or connector)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/11 15:58
S294	143	(phone or pda or tablet) same (mic or speaker or microphone or headphone) same (analog or digital or d/a or "digital to analog") same (converter or conversion or converting) same card same (jack or plug or connector)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/15 11:57
S295	47	((digital near2 analog) or d/a) same converter same ((credit or transaction or atm or debit) near3 card) same (sound or audio or mic or microphone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/15 11:58
S296	14	S295 AND ((G06K19/07 OR H04M2250/14 OR G06Q20/34 OR G06Q20/123 OR G06Q20/341).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/15 11:59

9/15/2015 3:19:51 PM
C:\Users\mshaikh\Documents\EAST\Workspaces\14636674.wsp

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Art Unit: 3694 Examiner: Shaikh, Mohammad Z

Confirmation No.: 3697

In Re:	Vincent Cedric Colnot et al.
Case:	P2207
Serial No.:	14/636,674
Filed:	March 3, 2015
Subject:	Methods and Apparatus for Enabling Secure Network-Based Transactions

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Response A

In the Claims

All of the claims standing for examination are reproduced below with appropriate status indication.

1. (Currently amended) An apparatus comprising:

~~a transaction card bearing data and having an output interface capable of transmitting the data;~~

a card reader having an input interface ~~enabled~~ configured to accept ~~the~~ digital data from ~~the~~ an output interface of ~~the~~ a transaction card;

conversion circuitry converting the ~~card~~ digital data to an analog modulated signal; and

an output pin from the card reader, the output pin ~~adapted~~ configured to engage in a microphone port of a ~~computerized appliance~~ personal computing device or a smart telephone, the conversion circuitry providing the analog modulated signal to the output pin ~~the output pin providing the analog modulated signal to the port, and thence to the computerized appliance~~.

2. (Currently amended) The apparatus of claim 1 ~~wherein the~~ further comprising a ~~computerized appliance~~ ~~is~~ personal computing device or a smart telephone configured to communicate on a network, the personal computing device or the smart telephone comprising a microphone port engaged with the output pin to receive the analog modulated signal and ~~has~~ ~~sound~~ conversion circuitry for converting the analog modulated signal to digital data for transmission on the network.

3-6. (Cancelled)

7. (Currently amended) The apparatus of claim [[3]] 2 wherein the personal computing device or smart telephone executes coded instructions ~~provide~~ providing two-way communication with a server hosted by a financial institution or an on-line merchant, and

the two-way communication ~~facilitate~~ facilitates transactions by an owner of [[the]] a transaction card with the financial institution or purchases by the owner of the card with an on-line merchant.

8. (Currently amended) The apparatus of claim 7 wherein the coded instructions operate to accept a card verification code (CVV) ~~in the card data~~, to use the CVV in the purchases or transactions, and for each transaction or purchase accomplished, a new CVV is created and stored ~~in the card data~~.

9. (Currently amended) A method comprising:

~~coupling a transaction card bearing data and having an output interface capable to transmit the data to~~ receiving digital data at an ~~a card reader having an~~ input interface ~~enabled to accept the data~~ of a card reader from ~~the~~ an output interface of [[the]] a transaction card;

converting the ~~card~~ digital data to an analog modulated signal by conversion circuitry; and

providing the analog modulated signal ~~by~~ to an output pin ~~from~~ of the card reader, the output pin ~~engaged~~ configured to engage in a microphone port of a personal computing device or a smart telephone ~~computerized appliance, to the computerized appliance~~.

10. (Currently amended) The method of claim 9 wherein the ~~computerized appliance~~ personal computing device or smart telephone communicates on a network, and has ~~sound~~ conversion circuitry converting the received analog modulated signal to digital data for transmission on the network.

11-14. (Cancelled)

15. (Currently amended) The method of claim [[11]] 10 wherein ~~the~~ coded instructions executing from a non-transitory medium provide two-way communication with a server hosted by a financial institution or an on-line merchant, and the two-communication facilitate transactions by an owner of [[the]] a transaction card with the financial institution or purchases by the owner of the transaction card with an on-line merchant.

16. (Original) The method of claim 15 wherein the coded instructions operate to accept a card verification code (CVV) ~~in the card data~~, to use the CVV in the purchases or transactions, and for each transaction or purchase accomplished, a new CVV is created and stored ~~in the card data~~.

REMARKS

This response is to the Office Action mailed on 05/19/2015. Regarding the 112 rejection the claims as amended no longer have the antecedent problem indicated.

Regarding the 102 rejection over KR 20030076045, of record, the applicant has studied the reference and determined that the card reader in the reference does not read data and provide the data to a computerized device through a microphone port. Moreover, the examiner, in applicant-initiated interview has indicated he understands that the reference does not teach the limitation. The applicant therefore believes the claims as amended above are patentable over the art cited and applied.

Summary

As all of the claims, as amended and argued above, have been shown to be patentable over the art presented by the Examiner, applicant respectfully requests reconsideration and the case be passed quickly to issue.

If any fees are due beyond fees paid with this amendment, authorization is made to deduct those fees from deposit account 50-0534. If any time extension is needed beyond any extension requested with this amendment, such extension is hereby requested.

Respectfully Submitted,
Vincent Cedric Colnot et al.

By */Donald R. Boys/*
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(831) 768-1755

Electronic Acknowledgement Receipt

EFS ID:	22856970
Application Number:	14636674
International Application Number:	
Confirmation Number:	3697
Title of Invention:	Methods and Apparatus for Enabling Secure Network-Based Transactions
First Named Inventor/Applicant Name:	Vincent Cedric Colnot
Customer Number:	24739
Filer:	Donald Rex Boys/Patricia Lambuth
Filer Authorized By:	Donald Rex Boys
Attorney Docket Number:	P1987.02
Receipt Date:	08-JUL-2015
Filing Date:	03-MAR-2015
Time Stamp:	14:20:26
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Amendment/Req. Reconsideration-After Non-Final Reject	1987_02oar1.pdf	20470 34cb5bd6ef683df2c20ab7c4c10a1af4365a337f	no	5

Warnings:	
Information:	

Total Files Size (in bytes):	20470

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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
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PTO/SB/06 (09-11)
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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 14/636,674	Filing Date 03/03/2015	☐ To be Mailed

ENTITY: ☐ LARGE ☒ SMALL ☐ MICRO

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	RATE ($)	FEE ($)
☒ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	140
☒ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A	300
☒ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	360
TOTAL CLAIMS (37 CFR 1.16(i))	16 minus 20 =	* 0	x $40 =	0
INDEPENDENT CLAIMS (37 CFR 1.16(h))	2 minus 3 =	* 0	x $210 =	0
☐ 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	800

APPLICATION AS AMENDED – PART II

AMENDMENT 07/08/2015

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	* 8	Minus	** 20	= 0	x $40 =	0
Independent (37 CFR 1.16(h))	* 2	Minus	***3	= 0	x $210 =	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

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	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	

* 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 number found in the appropriate box in column 1.

LIE
/AJAY R. DAVID/

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.**
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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
14/636,674	03/03/2015	Vincent Cedric Colnot	P1987.02

CONFIRMATION NO. 3697

24739
CENTRAL COAST PATENT AGENCY, INC
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PUBLICATION NOTICE



Title: Methods and Apparatus for Enabling Secure Network-Based Transactions

Publication No.US-2015-0178719-A1
Publication Date:06/25/2015

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.

The publication may be accessed through the USPTO's publically available Searchable Databases via the Internet at www.uspto.gov. The direct link to access the publication is currently http://www.uspto.gov/patft/.

The publication process established by the Office does not provide for mailing a copy of the publication to applicant. A copy of the publication may be obtained from the Office upon payment of the appropriate fee set forth in 37 CFR 1.19(a)(1). Orders for copies of patent application publications are handled by the USPTO's Office of Public Records. The Office of Public Records can be reached by telephone at (703) 308-9726 or (800) 972-6382, by facsimile at (703) 305-8759, by mail addressed to the United States Patent and Trademark Office, Office of Public Records, Alexandria, VA 22313-1450 or via the Internet.

In addition, information on the status of the application, including the mailing date of Office actions and the dates of receipt of correspondence filed in the Office, may also be accessed via the Internet through the Patent Electronic Business Center at www.uspto.gov using the public side of the Patent Application Information and Retrieval (PAIR) system. The direct link to access this status information is currently http://pair.uspto.gov/. Prior to publication, such status information is confidential and may only be obtained by applicant using the private side of PAIR.

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CENTRAL COAST PATENT AGENCY, INC
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Courtesy Reminder for
Application Serial No: 14/636,674

Attorney Docket No: P1987.02
Customer Number: 24739
Date of Electronic Notification: 05/19/2015

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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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/636,674	03/03/2015	Vincent Cedric Colnot	P1987.02	3697

24739 7590 05/19/2015

CENTRAL COAST PATENT AGENCY, INC
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EXAMINER
SHAIKH, MOHAMMAD Z

ART UNIT	PAPER NUMBER
3694	

NOTIFICATION DATE	DELIVERY MODE
05/19/2015	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):

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Office Action Summary	Application No. 14/636,674	Applicant(s) COLNOT ET AL.	
	Examiner MOHAMMAD Z. SHAIKH	Art Unit 3694	AIA (First Inventor to File) Status No

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

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *3/3/15*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ 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.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5)☒ Claim(s) *1-16* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-16* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, 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.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ 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)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date _____.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☒ Other: *See Continuation Sheet*.

Continuation of Attachment(s) 4). Other: machine transalation of KR 20030076045.

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

DETAILED ACTION

Claim Rejections- 35 U.S.C § 112

2. The following is a quotation of 35 U.S.C. 112(b):

> (b) CONCLUSION.—The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor or a joint inventor regards as the invention.

The following is a quotation of 35 U.S.C. 112 (pre-AIA), second paragraph:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 4, 12 are rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention.

5. Claim 4 recites the limitation "**the card value**" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 12 is rejected using the same rationale as claim 4.

Claim Rejections- 35 U.S.C § 102

6. The following is a quotation of the appropriate paragraphs of pre-AIA 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-3, 9-11 are being rejected under 35 U.S.C 102(b) as being anticipated by KR 20030076045, Korean patent application entitled, "The mobile credit card check apparatus and system for inquiring a credit card of the Bluetooth type", herein Bluetooth.

Regarding claim 1, Bluetooth discloses an apparatus comprising: a transaction card bearing data and having an output interface capable of transmitting the data (At least: Fig 1: C on page 9); a card reader having an input interface enabled to accept the data from the output interface of the transaction card (At least: Fig 2: CR on page 9; page 4: paragraphs 1, 2, 3, 4; page 5: paragraph 1, 4).

Bluetooth further discloses conversion circuitry converting the card data to an analog modulated signal an output pin from the card reader adapted to engage in a microphone port of a computerized appliance, the output pin providing the analog modulated signal to the port, and thence to the computerized appliance (At least: page 4: paragraph 6; page 5; Fig 4).

Regarding claim 2, Bluetooth discloses the apparatus of claim 1.

Bluetooth further discloses wherein the computerized appliance is enabled to communicate on a network, and has sound conversion circuitry converting the analog modulated signal to digital data (At least: page 4: paragraph 2; page 5: paragraph 1; Fig 2: network).

Regarding claim 3, Bluetooth discloses the apparatus of claim 2. Bluetooth further discloses wherein the computerized appliance comprise a processor executing coded instructions from a non-transitory medium, and the coded instruction executed by the processor cause the data to be used in a communication on the network (At least: page 4: paragraph 2; Fig 2: network).

Regarding claim 9, Bluetooth discloses a method comprising:
coupling a transaction card bearing data and having an output interface capable to transmit the data to a card reader (At least: Fig 2: CR on page 9; page 4: paragraphs 1, 2, 3, 4; page 5: paragraph 1, 4) having an input interface enabled to accept the data from the output interface of the transaction card (At least: Fig 1, Fig 4; page 4: paragraphs 1, 2, 3, page 4: paragraph 6; page 5: paragraph 1, 4).
Bluetooth further discloses converting the card data to an analog modulated signal by conversion circuitry; and providing the analog modulated signal by an output pin from the card reader engaged in a microphone port of a computerized appliance, to the computerized appliance (At least: pages 4-5; Fig 4).

Claim 10 is being rejected using the same rationale as claim 2.

Claim 11 is being rejected using the same rationale as claim 3.

Claim Rejections- 35 U.S.C 103

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

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 4-6, 12-14 are being rejected under 35 U.S.C 103(a) as being unpatentable over Bluetooth in view US Patent 6,481,623 to Grant et al, herein Grant

Regarding claim 4, Bluetooth discloses the apparatus of claim 1. However Bluetooth does not disclose wherein the transaction card comprises an electronic chip having a digital memory, and the card value is stored as a sequence of bits in the digital memory.

Grant discloses wherein the transaction card comprises an electronic chip having a digital memory, and the card value is stored as a sequence of bits in the digital memory (At least: column 11: lines 65-67; column 12: lines 1-12).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Bluetooth's invention to include wherein the transaction card comprises an electronic chip having a digital memory, and the card value is stored as a sequence of bits in the digital memory.

One of ordinary skill in the art would have been motivated to include wherein the transaction card comprises an electronic chip having a digital memory, and the card value is stored as a sequence of bits in the digital memory in order to ensure that the entire online transactions operates with efficiency.

Regarding claim 5, Bluetooth discloses the apparatus of claim 4. Bluetooth further discloses wherein the analog modulated signal is derived from the card value stored in the digital memory (At least: page 5: paragraph 4).

Claim 12 is being rejected using the same rationale as claim 4.

Claim 13 is being rejected using the same rationale as claim 5.

Regarding claim 6, Bluetooth discloses the apparatus of claim 5. Bluetooth discloses wherein the conversion circuitry is a part of the circuitry of the electronic chip (At least page 5: paragraphs 1, 2, 3, 4).

Claim 14 is being rejected using the same rationale as claim 6.

9. Claims 7,15 are being rejected under 35 U.S.C 103(a) as being unpatentable over Bluetooth in view of US Patent 6,607,136 to Atsmon et al, herein Atsmon.

Regarding claim 7, Bluetooth discloses the apparatus of claim 3. However Bluetooth does not disclose wherein the coded instructions provide two-way communication with a server hosted by a financial institution or an on-line merchant,

and the two-communication facilitate transactions by an owner of the card with the financial institution or purchases by the owner of the card with an on-line merchant.

Atsmon discloses wherein the coded instructions provide two-way communication with a server hosted by a financial institution or an on-line merchant, and the two-communication facilitate transactions by an owner of the card with the financial institution or purchases by the owner of the card with an on-line merchant (At least: Figs: 31, 45).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Bluetooth's invention to include wherein the coded instructions provide two-way communication with a server hosted by a financial institution or an on-line merchant, and the two-communication facilitate transactions by an owner of the card with the financial institution or purchases by the owner of the card with an on-line merchant.

One of ordinary skill in the art would have been motivated to include wherein the coded instructions provide two-way communication with a server hosted by a financial institution or an on-line merchant, and the two-communication facilitate transactions by an owner of the card with the financial institution or purchases by the owner of the card with an on-line merchant in order to ensure that the online transaction is processed in an efficient manner.

Claim 15 is being rejected using the same rationale as claim 7.

10. Claims 8,16 are being rejected under 35 U.S.C 103(a) as being unpatentable over Bluetooth in view of Atsmon and further in view of US Patent 7,761,374 to Sahota et al, herein Sahota.

Regarding claim 8, Bluetooth discloses the apparatus of claim 7. However Bluetooth does not disclose wherein the coded instructions operate to accept a card verification code (CVV) in the card data, to use the CVV in the purchases or transactions, and for each transaction or purchase accomplished, a new CVV is created and stored in the card data.

Sahota discloses wherein the coded instructions operate to accept a card verification code (CVV) in the card data, to use the CVV in the purchases or transactions, and for each transaction or purchase accomplished, a new CVV is created and stored in the card data (At least: Fig 3; Fig 6; Fig 7).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Bluetooth's invention to include wherein the coded instructions operate to accept a card verification code (CVV) in the card data, to use the CVV in the purchases or transactions, and for each transaction or purchase accomplished, a new CVV is created and stored in the card data.

One of ordinary skill in the art would have been motivated to include wherein the coded instructions operate to accept a card verification code (CVV) in the card data, to use the CVV in the purchases or transactions, and for each transaction or purchase accomplished, a new CVV is created and stored in the card data in order to ensure that the security of the online transactions are maintained.

Claim 16 is being rejected using the same rationale as claim 8.

CONCLUSION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MOHAMMAD Z. SHAIKH whose telephone number is (571)270-3444. The examiner can normally be reached on Monday-Thursday (9:00-5:30).

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

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.

/MOHAMMAD Z SHAIKH/
Primary Examiner, Art Unit 3694

5/14/2015

Notice of References Cited	Application/Control No. 14/636,674	Applicant(s)/Patent Under Reexamination COLNOT ET AL.	
	Examiner MOHAMMAD Z. SHAIKH	Art Unit 3694	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-6,481,623	11-2002	Grant et al.	235/449
*	B	US-6,607,136	08-2003	Atsmon et al.	235/492
*	C	US-7,761,374	07-2010	Sahota et al.	705/39
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N	KR 20030076045	10-2002	KOREA	TAE-SUN YEO	G06K 17/00
	O					
	P					
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NON-PATENT DOCUMENTS

*		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.

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(19)The Korean Intellectual Property Office (KR)
Registered Patent (B1)

(51) Int.Cl. 6
G06K 17/00

Examined Publication Date	2004-11-06
Registration No	10-0455528
Registration Date	2004-10-25
Application No	10-2002-0015690
Application Date	2002-03-22
Publication No	10-2003-0076045
Publication Date	2003-09-26
Agent	
Inventor	Tae-Sun Yeo
Right Holder	Tae-Sun Yeo
Examiner	Du-Han Lee
Title of Invention	The mobile credit card check apparatus and system for inquiring a credit card of the bluetooth type.

Abstract

The present invention relates to the system for inquiring a credit card comprised by the main credit inquiry terminal device communicating of the portable credit inquiry terminal device and portable credit inquiry terminal device having the built-in wireless telecommunication mini printer apparatus it communicates to the main credit inquiry terminal device and bluetooth type and bluetooth type. The portable credit inquiry terminal device of the invention may comprise the main equipment for being connected to the card van server through the communications network and the bluetooth communications means communicating with the bluetooth type, the card reader method reading out the recorded information of card, and the control means which controls so that it delivers the payment authentication request-information including the printer device, printing the card sales slip and key input unit comprised of all kinds of the key buttons for requesting the card payment and the settlement amount information inputted from the key input unit and the information which is stuck out with the card reader method to the main equipment through the bluetooth communications means and it prints the card sales slip through the printer device if the payment authorization information is received from the main equipment through the bluetooth communications means.

Representative Drawing(s)

Fig. 2

Keyword(s)

This document is performed by machine translation, and KIPO is not responsible for the result of translation

The Bluetooth, and the credit inquiry.

Description

※ Brief Explanation of the Drawing(s)

Figure 1 is drawing showing the system for inquiring a credit card of the bluetooth type according to the invention

Figure 2 is drawing showing the detail circuit block configuration of the mobile credit card check apparatus of the bluetooth type and main credit card checker in fig. 1

Figure 3 is drawing for illustrating the credit card payment process flow in the system for inquiring a credit card of the bluetooth type according to the present invention

Figure 4 is a drawing showing the voice communications flow by the Bluetooth between the mobile credit card check apparatus of the bluetooth type and the main credit card checker in the system for inquiring a credit card of the bluetooth type according to the present invention.

※ The description of reference numerals showing the main elements in drawings.

C: credit card CR1~ CR7: mobile credit card check apparatus.

CR_ M: main credit card checker CV: card company van server.

CP: card sales slip N: communications network.

EM: ear-mic HS: head set.

100,200: bluetooth communications module 105,205: data signal processing unit.

110,210: coder-decoder 115,215: analog to digital converter.

120,220: digital to analog converter 130,230: controller.

135,235: memory 145,245: bell driver.

150,250: bell 155,255: card reader part.

160,260: printer driver 165,265: printer mechanism.

270: wired communications module.

※ Details of the Invention

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▩ Purpose of the Invention

▪ The Technical Field to which the invention belongs and the Prior Art in that Field

The invention relates to the portable credit inquiry terminal device and system for inquiring a credit card of the bluetooth type, more specifically to the system for inquiring a credit card comprised by the main credit inquiry terminal device communicating of the portable credit inquiry terminal device and portable credit inquiry terminal device having the built-in mini printer apparatus it can communicate to the main credit inquiry terminal device and bluetooth type and bluetooth type.

As the present, and the industry develop and the economy is grown up the transaction on credit by the transactions media called the credit card jumps than the transactions by cash. There can be the convenience of using as the cash alternative without the particular problem the transactions by this credit card has the advantage which is no need to go to and from having cash in the user side although the balance is not in the credit card payment account in the usage of credit card the balance coming under the credit card settlement day to the payment amount can be available at the credit card payment account.

It often has the case of going to the current gas station or the counter desk in which the employee is the credit inquiry terminal device the credit card the client presents the credit card in the department store etc is installed and manipulating the credit inquiry terminal device and printing the card sales slip. In the business site due to this convention, the press reports as the case receiving card from the client and moves to the scene where the client is unable to look and intentionally dually issues the card sales slip.

The development of the apparatus for providing convenience while it removes the problem of issuance among this of this kind of card sales slip is demanded.

▪ The Technical Challenges of the Invention

The present invention is suggested to solve the above conventional problems, and an object of the present invention is that in the main credit inquiry terminal device installed at the counter desk and long distance, the portable credit inquiry terminal device printing the card sales slip to the bluetooth type with data communications tries to be provided.

And it is another object of the present invention to provide the portable credit inquiry terminal device configured to the voice communications with the main credit inquiry terminal device be possible while can print the card sales slip by the bluetooth type data communications in the main credit inquiry terminal device installed at the counter desk and long distance.

Moreover, it is still another object of the present invention to provide the system for inquiring a credit card made of the portable credit inquiry terminal device of the multiple capable of the voice communications and data communications with the main credit inquiry terminal device and bluetooth type.

To achieve the above object, the portable credit inquiry terminal device according to the present invention may comprise the main equipment for being connected to the card van server through the communications network and the bluetooth communications means communicating with the bluetooth type, the card reader method reading out the recorded information of card, and the control means which controls so that it delivers the payment authentication request-information including the printer device, printing the card sales slip and key input unit comprised of all kinds of the key buttons for requesting the card payment and the settlement amount information inputted from the key input unit and the information which is stuck out with the card reader method to the main equipment through the bluetooth communications means and it prints the card sales slip through the printer device if the payment authorization information is received from the main equipment through the bluetooth communications means.

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Here, it more comprises the voice communications means for performing the main equipment and voice communications the control means through the bluetooth communications means.

Moreover, the system for inquiring a credit card according to the present invention to achieve above object comprises the multiple portable credit inquiry terminal devices which is communication-contacted with the main equipment, for being connected to the card van server through the communications network and requesting the payment authentication of card to the card van server the main equipment and bluetooth type and requests the payment authentication about the predetermined card via the main equipment in the card van server and prints the sales check about the target card if the acknowledgement signal is received about the payment authentication via the main equipment.

The main equipment and portable credit inquiry terminal device include the means which each other can voice-communicate with the bluetooth type and data communications.

▩ Structure & Operation of the Invention

Hereinafter, it particularly illustrates for the mobile credit card check apparatus and system for inquiring a credit card of the bluetooth type according to a preferred embodiment of the present invention with reference to the attached view.

Figure 1 is a schematic diagram of the system for inquiring a credit card of the bluetooth type according to the present invention.

In the same figure, it is to the main equipment installed at the reference numeral CR N is the counter desk of the business site through the communications network (N) in the card company van server (CV) the connectable configuration. And it is the portable credit inquiry terminal device in which the CR1~CR7 connects through the main equipment (CR M) and bluetooth type communications and which requests the payment authentication of the credit card to the card company van server (CV) through the main equipment and which receives the approval about the payment authentication through the main equipment (CR M) and printing the credit card sales slip.

The main equipment (CR M) comprises PDA which is the credit inquiry terminal device including the credit card reader it is the configuration of elementarily performing the function of arranging the payment authentication acknowledgement signal and the printer (the dot printer, the thermal printer, or the color printer) or the personal computer having the built-in moreover, the card company van server through the communications network (N) and the communications card enabling to communicate it has within the bluetooth communications card enabling to communicate with the portable credit inquiry terminal device (CR1~CR7) and bluetooth type and wireless telecommunication device having the built-in bluetooth communications card it is portable. Hereinafter, it is only the simplicity of the description and it decides to illustrate as the main equipment (CR M) for the main credit inquiry terminal device.

The main credit inquiry terminal device (CR M) and portable credit inquiry terminal device (CR1~CR7) comprise the voice communications means voice-communicating with the respective bluetooth type. The main credit card Joudan word apparatus (CR M) has the function of as shown in the figure voice-communicating through the head set (HS) or the ear-mic (ear microphone) (EM) built in as the voice communications means or it or is the configuration where the telephone receiver is mounted. Moreover, as shown in the figure, or, the portable credit inquiry terminal device (CR1~CR7) is desirable as the respective voice communications means as the head set (HS) to have the function of voice-communicating through the ear-mic (EM) built in.

Figure 2 is a drawing showing the detail circuit block configuration of the mobile credit card check apparatus of the bluetooth type and main credit card checker in fig. 1.

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As shown in the copper drawing, with the memory (135) of temporarily saving the credit card information which converts the analog audio signal inputted with the portable credit inquiry terminal device, is the intermediation the jack (125) from the main credit inquiry terminal device and the bluetooth communications module (100) for voice-communicating it data communicates and data signal processing unit (105): signal-processing the bluetooth communications module (100) data communicating with the main credit inquiry terminal device with the intermediation and the coder-decoder (110): signal-processing the bluetooth communications module (100) audio data communicating with the main credit inquiry terminal device with the intermediation and the ear-mic (EM) connected to for example, the jack (125) in the voice communications into the digital voice signal and which has the driving program of the analog to digital converter (115): outputted to the coder-decoder (110) and the digital to analog converter (120): which is received through the bluetooth communications module (100) and converts the digital voice signal signal-processed in the coder-decoder (110) into the analog audio signal and outputs the jack (125) to the intermediation to for example, the ear-mic (EM) and the controller (130): taking charge of the whole control of the apparatus and apparatus built in and read out in moreover, the credit inquiry through the card reader part it comprises the bell driver (145) for driving the bell (150) by the control of the controller in the reception of the voice communications request through the bluetooth communications module (100), the printer driver (160) for driving the printer mechanism (165) by the control of the card reader part (155): reading out the information of the credit card (C) and the printer mechanism (165) printing the credit card sales slip and controller (130) and key input unit (140) including all kinds of the function buttons for the card inquiry and the numeric button.

And. With the memory (235) of temporarily saving the credit card information which converts analog audio signal inputted with the main credit inquiry terminal device, is the intermediation the jack (225) from the portable credit inquiry terminal device and the bluetooth communications module (200) for voice-communicating it data communicates and data signal processing unit (205): signal-processing the bluetooth communications module (200) data communicating with the main credit inquiry terminal device with the intermediation and the coder-decoder (210): signal-processing the bluetooth communications module (200) audio data communicating with the main credit inquiry terminal device with the intermediation and the head set (HS) connected to for example, the jack (225) in the voice communications into the digital voice signal and which has the driving program of the analog to digital converter (215): outputted to the coder-decoder (210) and the digital to analog converter (220): which is received through the bluetooth communications module (200) and converts the digital voice signal signal-processed in the coder-decoder (210) into the analog audio signal and outputs the jack (225) to the intermediation to for example, the head set (HS) and the controller (230): taking charge of the whole control of the apparatus and apparatus built in and read out in moreover, the credit inquiry through the card reader part (255). It comprises the bell driver (245) for driving the bell (250) by the control of the controller (230) in the reception of the voice communications request through the bluetooth communications module (200), the printer driver (260) for driving the printer mechanism (265) by the control of the card reader part (255): reading out the information of the credit card (C) and the printer mechanism (265) printing the credit card sales slip and controller (230) and key input unit (240) including all kinds of the function buttons for the card inquiry and the numeric button.

Next, the credit card payment process method in the system for inquiring a credit card of the portable credit inquiry terminal device constructed as described above and the bluetooth type including the main credit inquiry terminal device will be illustrated with reference to Figure 3.

Firstly, if the credit card (C) is contacted in the card reader part (155) of the portable credit inquiry terminal device the recorded information of the credit card (C) is stuck out and the card information is temporarily stored in the memory (135). If the user manipulates the key input unit (140) and the payment amount is input the inputted settlement amount information is temporarily stored in the memory (135) (step S1).

Thereafter, if the controller (130) produces the communications request message including its own identification code and it outputs to data signal processing unit (105) data signal processing unit (105) signal-processes the communications request message according to the Bluetooth communications method and it outputs through the bluetooth communications module (100) to the main credit inquiry terminal device (step S2).

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Subsequently, the controller (230) of the main credit inquiry terminal device which is received through the bluetooth communications module (200) and is delivered the communications request message signal-processed in data signal processing unit (205) recognizes clearly whether it is the communications request at any kind of portable credit inquiry terminal device and or not the communications emptiness assigning the predetermined data communications channel outputs the message to the corresponding portable credit inquiry terminal device through data signal processing unit (205) and bluetooth communications module (200) (step S3).

Next, if payment authentication request message including the card information in which the controller (130) of the portable credit inquiry terminal device receiving through data communications processing part (105) is stored in the memory (135) and settlement amount information are produced and it outputs to data signal processing unit (105) data signal processing unit (105) signal-processes the payment authentication request message according to the Bluetooth communications method and it outputs through the bluetooth communications module (100) to the main credit inquiry terminal device (step S4).

Thereafter, the controller (230) of the main credit inquiry terminal device which is received through the bluetooth communications module (200) and is delivered the payment authentication request message signal-processed in data signal processing unit (205) operates the wired communications module (270) and the communications channel with the card company van server (CV) is formed and the payment authentication request message is transmitted through the communications network (N) in the van server (CV) (the step S5, and the S6).

Subsequently, if for example, the payment authorisation message is transmitted as the payment authentication process result of the van server (CV) through the communications network (N) in the main credit inquiry terminal device (the step S7, and the S8) the controller (230) of the main credit inquiry terminal device receives the payment authorisation message through the wired communications module (270) and the payment authorisation message is outputted through data signal processing unit (205) and bluetooth communications module (200) (step S9).

Next, it controls so that the controller (130) of the portable credit inquiry terminal device receiving the payment authorisation message through the bluetooth communications module (100) and data communications processing part (105) outputs the information included in the payment authentication message to the printer driver (160) and the card sales slip (CP) is printed with the printer mechanism (165) and it is outputted (step S10).

As described above, at the same time, 7 portable credit inquiry terminal devices can perform the credit card payment process by the medium of one main credit inquiry terminal device with the bluetooth type.

Here, when the bluetooth communications card is the card checker device for the main scene mounted and PDA which the credit card company VAN and wireless is connectable is used if one person has this among the human carrying the portable credit inquiry terminal device the moving range of the portable credit inquiry terminal device is above-described PDA greatly improved.

That is, PDA which becomes with the credit card company and radio link and can receive the credit card approving is moved. In that way if the above-described f , and the configuration of PDA mount to possible PDA only the bluetooth communications card the moving range of the portable credit inquiry terminal device is greatly improved the configuration detailed because it is usable omits.

Next, in the system for inquiring a credit card of the bluetooth type including the main credit inquiry terminal device and portable credit inquiry terminal device constructed as described above, it illustrates for the voice communications method with reference to fig. 4.

Firstly, if the user manipulates the key input unit (140) of the portable credit inquiry terminal device and the convention mode is set up the controller (130) recognizes the convention mode establishment. If the voice communications request message is produced and the user outputs to data signal processing unit (105) data

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signal processing unit (105) signal-processes the voice communications request message according to the Bluetooth communications method and the user outputs through the bluetooth communications module (100) to the main credit inquiry terminal device (step S11).

Subsequently, it is received through the bluetooth communications module (200) and the controller (230) of the main credit inquiry terminal device delivered the voice communications request message signal-processed in data signal processing unit (205) recognizes clearly whether it is the voice communications request at any kind of portable credit inquiry terminal device and or not the bell driver (245) is controlled and the bell (250) is driven and it notifies human who is in for example, the main credit inquiry terminal device neighborhood that human has the call request. If the human giving this bell signal manipulates the key input unit (240) and the voice mode is set up the controller (230) recognizes clearly this. The voice communications emptiness outputs the message through data signal processing unit (205) and bluetooth communications module (200) with assigning the predetermined voice communications channel to the corresponding portable credit inquiry terminal device (step S12).

Next, the controller (130) of the portable credit inquiry terminal device in which the communications emptiness receives the message through the bluetooth communications module (100) and data communications processing part (105) are for the establishment of the convention mode through the above-mentioned allocated voice communications channel. Accordingly, after it is signal-processed in the coder-decoder (110) according to the Bluetooth communications method after voice from the ear-mic (EM) connected to the jack (125) of the portable credit inquiry terminal device is transformed from the analog to digital converter (115) to the digital voice signal it is outputted through the bluetooth communications module (100). After it is signal-processed in the coder-decoder (210) the audio signal received in the bluetooth communications module (200) of the main credit inquiry terminal device is transformed from the digital to analog converter (220) to the analog audio signal and it is outputted to the head set (HS) connected to the jack (225).

In the meantime, after it is signal-processed in the coder-decoder (210) according to the Bluetooth communications method after voice from the head set (HS) connected to the jack (225) of the main credit inquiry terminal device is transformed from the analog to digital converter (215) to the digital voice signal it is outputted through the bluetooth communications module (200). After it is signal-processed in the coder-decoder (110) the audio signal received in the bluetooth communications module (100) of the portable credit inquiry terminal device is transformed from the digital to analog converter (120) to the analog audio signal and it is outputted to the ear-mic (EM) connected to the jack (125). According to this procedure, the voice communications is made between the portable credit inquiry terminal device and main credit inquiry terminal device (the step S13, the S13', and the S13").

Thereafter, in a one-way, among the carrying credit inquiry terminal device and main credit inquiry terminal device is this example, if the main credit inquiry terminal device terminates the convention mode the controller (230) of the main credit inquiry terminal device recognizes this and the call completion message is produced and it outputs through data signal processing unit (205) and bluetooth communications module (200) (step S14). The controller (130) of the portable credit inquiry terminal device receiving the call completion message through the bluetooth communications module (100) and data signal processing unit (105) controls in order to terminate the convention mode. Simultaneously the convention mode termination acknowledgement message is produced and it outputs through data signal processing unit (105) and bluetooth communications module (100) (the step S15). In order to terminate the convention mode the controller (230) of the main credit inquiry terminal device receiving the call completion message through the bluetooth communications module (200) and data signal processing unit (205) controls and the above-mentioned allocated voice communications channel is collected at the same time.

As described above, in the counter desk of business site in which the main credit inquiry terminal device and this system the voice communications can be performed between the portable credit inquiry terminal device with the bluetooth type are installed, it can speak by telephone with the employee carrying the portable credit inquiry terminal device. And the employee carrying moreover, the portable credit inquiry terminal device can inquire about all kinds of the contents to the counter desk with the voice communication.

In the meantime, it variously can modify in the range in which the invention is not restricted to the above-described embodiment but that may not deviate from the gist of the invention and it changes and it perform. With it belongs to the patent claim of less than that correction and the technical spirit in which deformation is applied have to look.

▩ Effects of the Invention

As described in detail in the above, using according to the invention, data communications of the bluetooth type between the portable credit inquiry terminal device and the main equipment (PDA inclusion), while the problem of issuance is removed among this of the card sales slip since the credit card is inquired and the sales check can be printed the card payment convenience of the credit card use client is offhandedly provided. Moreover, it has the indication or the convenience can ask in the business site which sets up the invention system between the portable credit inquiry terminal device and main equipment since the voice communications by the bluetooth type is possible between the employee carrying the counter desk (PDA which or is communicationable with Bluetooth) and portable credit inquiry terminal device with the voice communication.



Scope of Claims

Claim 1 :
Deletion.

Claim 2 :
Deletion.

Claim 3 :
It is communication-contacted with the main equipment and the main equipment for being connected to the card van server through the wireless and PSTN and requesting the payment authentication of card to the card van server and bluetooth type. The payment authentication request-information including the printer device, printing the card sales slip and key input unit comprised of the main equipment in which the credit inquiry terminal device is connected to the card van server as to the comprised system for inquiring a credit card through the wireless and PSTN and the bluetooth communications means, communicating with the bluetooth type and the card reader method, reading out the recorded information of card and all kinds of the key buttons for requesting the card payment to multiple portable credit inquiry terminal devices requesting the payment authentication about the predetermined card via the main equipment in the card van server and print the sales check about the target card if the acknowledgement signal is received about the payment authentication via the main equipment and the voice communications means, for performing the main equipment and voice communications through the bluetooth communications means and the settlement amount information inputted from the key input unit and the information which is stuck out with the card reader method is delivered to the main equipment through the bluetooth communications means. The portable credit inquiry terminal device comprised of the control means which controls so that it prints the card sales slip through the printer device if the payment authorization information is received from the main equipment through the bluetooth communications means.

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Claim 4 :
Deletion.

Drawings

Fig. 1

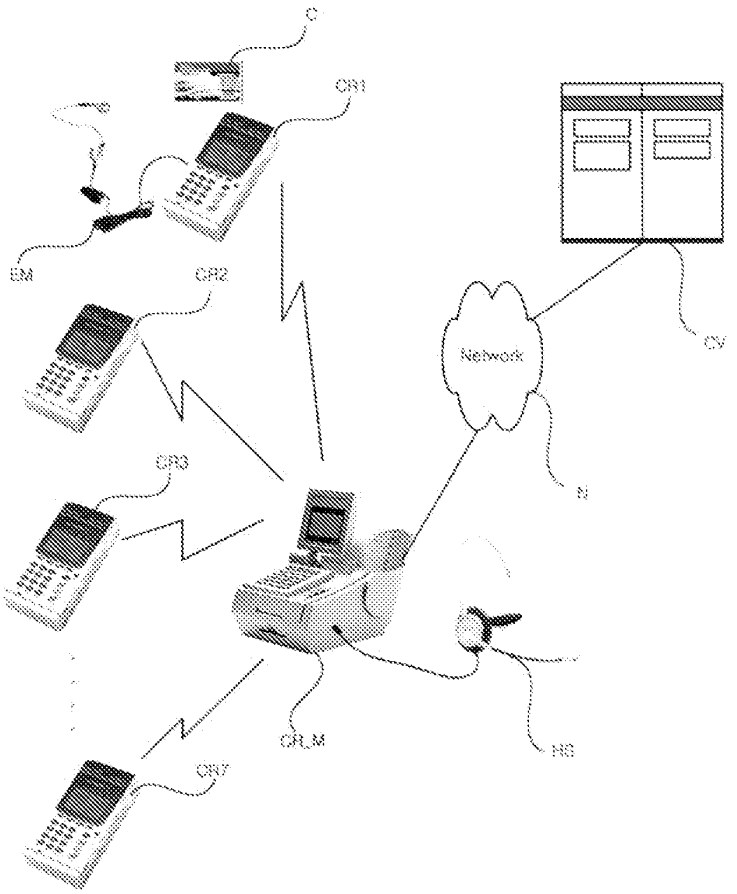


Fig. 2

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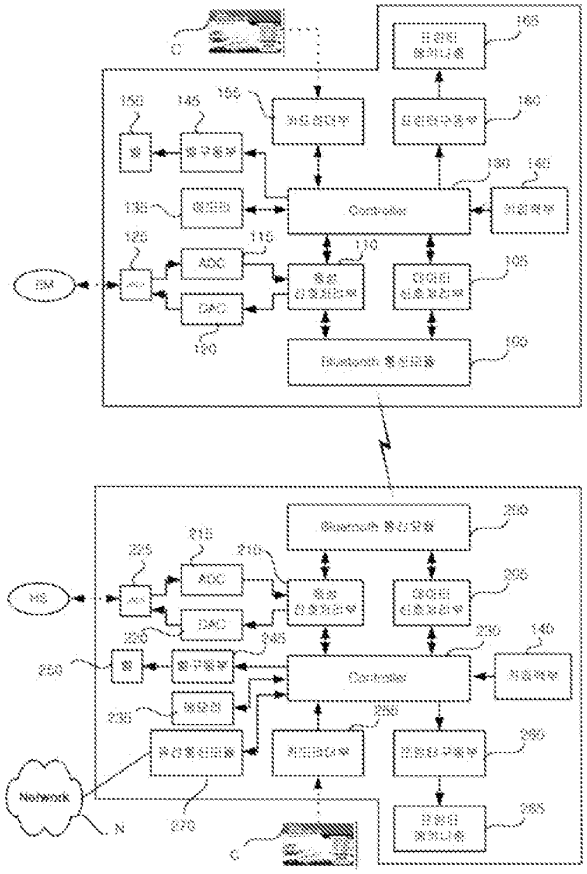


Fig. 3

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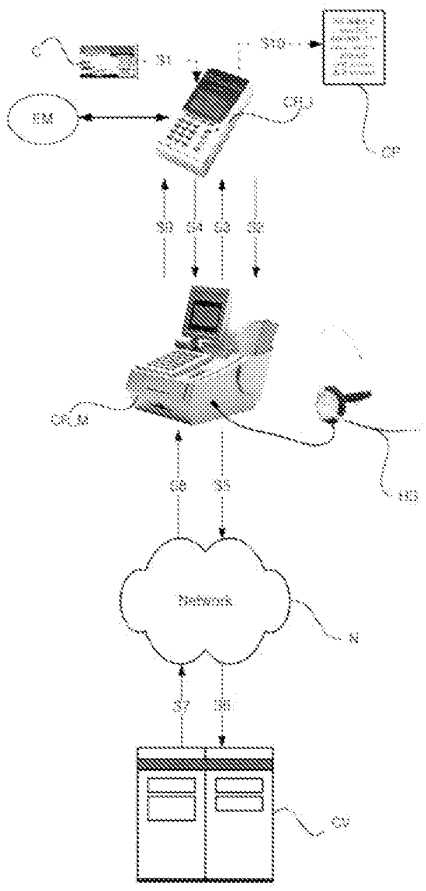
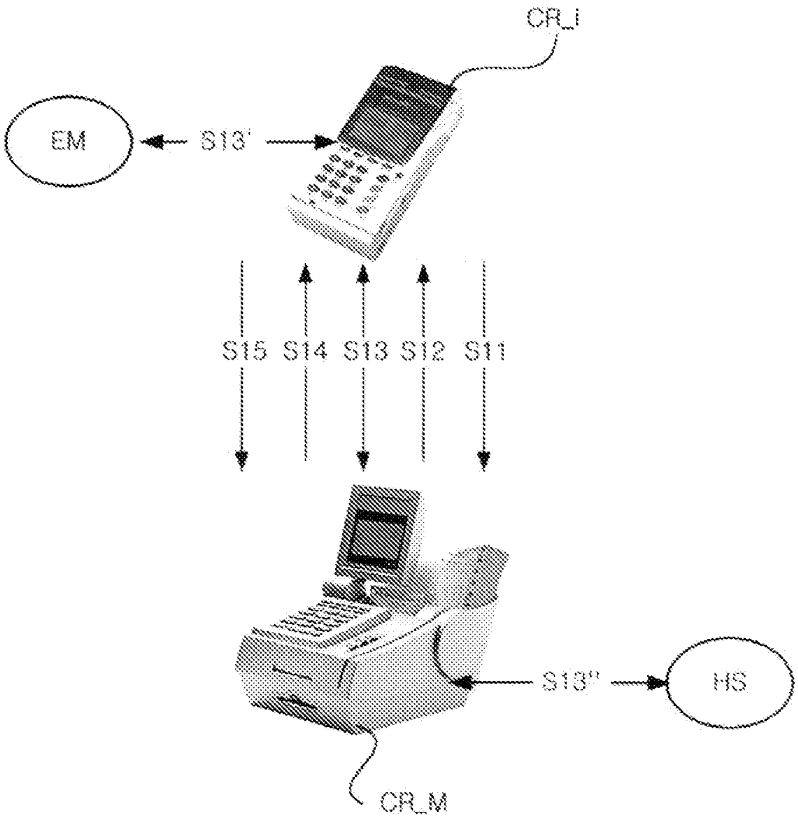


Fig. 4

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EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	77	card same reader same (audio or sound or mic or microphone) same credit same analog same digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/05 13:53
S2	89	card same reader same (audio or sound or mic or microphone) same credit same analog same digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 13:53
S3	0	card same reader same (audio or sound or mic or microphone) same credit same analog same digital same (cvv or "credit verification value")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 13:53
S4	0	card same reader same (audio or sound or mic or microphone) same credit same analog same digital and (cvv or "credit verification value")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 13:53
S5	581	"l89" and (cvv or "credit verification value" or "security code" or code or pin or alias)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/05 13:54
S6	78	S2 and (cvv or "credit verification value" or "security code" or code or pin or alias)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/05 13:54
S7	1	"sound pass" same credit same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/05 14:00
S8	5	ohva and microphone	US-PGPUB;	OR	OFF	2015/05/05

			USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			14:01
S9	34	("2004/0093496").URPN.	USPAT	OR	OFF	2015/05/05 14:03
S10	34	S9 and transaction and card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/05 14:03
S11	6607	(sound near2 card) same (mic or microphone or speaker) same (transaction or smart or debit or card or "stored value" or atm) same card same (reader or scanner or scan or read or reading)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:13
S12	1027	(sound near2 card) same (mic or microphone or speaker) same (transaction or smart or debit or card or "stored value" or atm) same card same (reader or scanner or scan or read or reading) same analog same digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:13
S13	63	(sound near2 card) same (mic or microphone or speaker) same (transaction or smart or debit or card or "stored value" or atm) same card same (reader or scanner or scan or read or reading) same analog same digital same signal	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:13
S14	2	(sound near2 card) same (mic or microphone or speaker) same ((transaction or smart or debit or card or "stored value" or atm) near2 card) same (reader or scanner or scan or read or reading) same analog same digital same signal	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:18
S15	405	(sound near2 card) same (mic or microphone or speaker) same ((transaction or smart or debit or card or "stored value" or atm) near2 card) same (reader or scanner or scan or read or reading) same analog same digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:19
S16	1	(sound near2 card) same (mic or microphone or speaker) same ((transaction or smart or debit or "stored value" or atm) near2 card) same (reader or scanner or scan or read or reading) same analog same digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:19
S17	2	(sound near2 card) same (mic or microphone or speaker) same ((transaction or smart or debit or "stored value" or atm) near2 card)	US-PGPUB; USPAT; USOCR; FPRS; EPO;	OR	ON	2015/05/05 14:19

		same (reader or scanner or scan or read or reading) same converter	JPO; DERWENT; IBM_TDB			
S18	34	(computer or pda or table or phone or pda or device) same (mic or microphone or speaker) same ((transaction or smart or debit or "stored value" or atm) near2 card) same (reader or scanner or scan or read or reading) same converter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:21
S19	81	(computer or pda or table or phone or pda or device) same (mic or microphone or speaker) same (transaction or smart or debit or "stored value" or atm) same card same (reader or scanner or scan or read or reading) same converter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:23
S20	144	"Mag Tek"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/05 14:27
S21	1	S20 and (mic or microphone or speaker) same (transaction or smart or debit or "stored value" or atm) same card same (reader or scanner or scan or read or reading) same converter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:28
S22	1	S20 and (mic or microphone or speaker) same (transaction or smart or debit or "stored value" or atm) same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:28
S23	1	S20 and (mic or microphone or speaker) same (transaction or smart or debit or "stored value" or atm)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:28
S24	1	S20 and ((mic or microphone or speaker) same (transaction or smart or debit or "stored value" or atm))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:29
S25	678	audio same jack same card same reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/05 14:30
S26	205	audio same jack same card same reader same (financial or debit or	US-PGPUB; USPAT;	OR	OFF	2015/05/05 14:31

		transaction or credit or atm)	USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S27	3	audio same jack same card same reader same (financial or debit or transaction or credit or atm) same converter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:31
S28	231	audio same jack same card same reader same (financial or debit or transaction or credit or atm)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:31
S29	20	audio same jack same card same reader same (financial or debit or transaction or credit or atm) same pin	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:31
S30	7	S29 AND ((G06Q20/3272 OR G06Q20/3278).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/05 14:38
S31	4	"20040093496"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/05 14:38
S32	3	"6708892".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 16:54
S33	1	"6708892".pn. and network	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 16:55
S34	0	"6708892".pn. and sequence	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 16:57

S35	0	"6708892".pn. and chip	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 16:57
S36	95	electronic same chip same digital same memory same amount same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 16:58
S37	28	electronic same chip same digital same memory same amount same card same (credit or debit or atm)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 16:59
S38	2	"6641050".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 17:14
S39	1	"6641050".pn. and bit	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 17:14
S40	179	("6641050").URPN.	USPAT	OR	OFF	2015/05/12 17:16
S41	25	S40 and memory and chip and bit and card and (value or money)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 17:19
S42	20	electronic same chip same digital same memory same amount same card same analog same digital	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 17:21
S43	0	card near2 chip same credit same bit same analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 17:23
S44	0	card near7 chip same credit same bit same analog	US-PGPUB; USPAT; USOCR;	OR	OFF	2015/05/12 17:23

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S45	2	card same chip same credit same bit same analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 17:23
S46	255	card same chip same credit same bit	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 17:24
S47	76	card same chip same credit same bit same value	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 17:24
S48	28	card same chip same credit same bit same value same (conversion or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 17:24
S49	9	card same integrated same circuit same credit same bit same value same (conversion or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 17:25
S50	16	integrated same circuit same credit same bit same value same (conversion or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 17:30
S51	8	"integrated circuit" same credit same card same digital same converter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 17:34
S52	164	("5920628").URPN.	USPAT	OR	OFF	2015/05/12 17:39
S53	1	"7761374".pn. and (integrated or chip)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	OFF	2015/05/12 17:45

			IBM_TDB			
S54	4	"5546462".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 17:47
S55	3	"6708892".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 17:49
S56	1	"6708892".pn. and (integrated or circuit or chip)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 17:50
S57	1	"7761374".pn. and (digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/12 17:50
S58	1	"6708892".pn. and (integrated or circuit or chip)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 17:52
S59	2	"6708892".pn. and smart	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/12 17:53
S60	4	"6607136".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 08:54
S61	2	"7334735".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 09:02
S62	1	"7334735".pn. and (card and converter)	US-PGPUB; USPAT; USOCR; FPRS; EPO;	OR	OFF	2015/05/13 09:03

			JPO; DERWENT; IBM_TDB			
S63	1	"7334735".pn. and (card and digital and (convert or converting or converter)) and analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 09:06
S64	1	"7334735".pn. and (digital and (convert or converting or converter)) and analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 09:06
S65	1	"6708892".pn. and (digital and (convert or converting or converter)) and analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 09:08
S66	163	(digital near2 analog) same converter same (credit or transaction or atm or debit) same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 09:16
S67	292	(digital near2 analog) same converter same (credit or transaction or atm or debit) same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 09:16
S68	79	(digital near2 analog) same converter same (credit or transaction or atm or debit) same card same (sound or audio or mic or microphone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 09:17
S69	42	(digital near2 analog) same converter same ((credit or transaction or atm or debit) near3 card) same (sound or audio or mic or microphone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 09:20
S70	46	((digital near2 analog) or d/a) same converter same ((credit or transaction or atm or debit) near3 card) same (sound or audio or mic or microphone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 09:24
S71	2	"7620759".pn.	US-PGPUB; USPAT;	OR	ON	2015/05/13 09:37

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S72	2	"6481623".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 09:40
S73	2	"6481623".pn. and (mic or microphone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 09:48
S74	3	"6708892".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 09:50
S75	1	"6708892".pn. and reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 09:51
S76	1	"6708892".pn. and reader and (mic or microphone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 10:32
S77	1	"6607136".pn. and (mic or microphone) and computer and analog and signal and (convert or converting or converter)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 10:39
S78	1	"6607136".pn. and (mic or microphone) and computer and analog and signal and (convert or converting or converter) and reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 10:44
S79	1	"7334735".pn. and (mic or microphone) and computer and analog and signal and (convert or converting or converter) and reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 10:46

S80	15	("6708892").URPN.	USPAT	OR	OFF	2015/05/13 10:58
S81	5	"7118027".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:06
S82	2	"5763862".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:07
S83	2	"6481623".pn. and (mic or microphone) and reader	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:08
S84	117	("6481623").URPN.	USPAT	OR	OFF	2015/05/13 11:10
S85	2	"7225994".pn. and (mic or microphone) and reader and card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:17
S86	106	("7225994").URPN.	USPAT	OR	OFF	2015/05/13 11:18
S87	1	"20050263590" and (mic or microphone) and reader and card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:21
S88	491360	(computer or device) same (mic or microphone) sam reader same (Smart near2 card) same (convert or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:24
S89	405	(computer or device) same (mic or microphone) same reader same (Smart near2 card) same (convert or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:25
S90	504	(computer or device) same (mic or microphone) same reader same (Smart near2 card) same (convert or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	ON	2015/05/13 11:25

			DERWENT; IBM_TDB			
S91	127	(computer or device) near5 (mic or microphone) same reader same (Smart near2 card) same (convert or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 11:25
S92	122	(computer or device) near5 (mic or microphone) same reader same (credit near2 card) same (convert or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 11:29
S93	3	(computer or device) near5 (mic or microphone) near5 reader same (credit near2 card) same (convert or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 11:29
S94	5	(computer or device) near5 (mic or microphone) near7 reader same (credit near2 card) same (convert or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 11:30
S95	457	(computer or device) near5 (mic or microphone)same (card near2 reader) same (convert or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 11:31
S96	93	(computer or device) near5 (mic or microphone)near5 (card near2 reader) same (convert or converter or digital or analog)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 11:31
S97	106	(computer or device) near5 (mic or microphone)same (card near2 reader) same (convert or converter or digital or analog) same transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/13 11:31
S98	251	"card reader" same audio same (mic or microphone) same computer	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:39
S99	3	"card reader" same audio same (mic or microphone) same computer same converter	US-PGPUB; USPAT; USOCR;	OR	OFF	2015/05/13 11:40

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S100	98	"card reader" same audio same (mic or microphone) same computer same (analog or digital)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:40
S101	54	"reader" same audio same (mic or microphone) same computer same (analog or digital) same (credit or debit or smart)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:44
S102	44	"reader" same sound same (mic or microphone) same computer same (analog or digital) same (credit or debit or smart)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:46
S103	2	"5799036".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:53
S104	0	"5799036".pn. and reader and microphone	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:54
S105	1	"5799036".pn. and card and microphone	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:54
S106	94	("5799036").URPN.	USPAT	OR	OFF	2015/05/13 11:56
S107	1	S63 and "Card reader"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:56
S108	0	S106 and "Card reader"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	OFF	2015/05/13 11:57

			IBM_TDB			
S109	10	S106 and "reader"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:57
S110	1	"card reader" same device same microphone same transaction same ("a/d" or "analog to digital" or "d/a" or "digital to analog")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:58
S111	1	"reader" same device same microphone same transaction same ("a/d" or "analog to digital" or "d/a" or "digital to analog")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:59
S112	10	"card reader" same device same microphone same ("a/d" or "analog to digital" or "d/a" or "digital to analog")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 11:59
S113	5	"card reader" same (phone or computer or table or pda) same microphone same ("a/d" or "analog to digital" or "d/a" or "digital to analog")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 12:00
S114	6	"7810729".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 12:03
S115	7	"20020030871"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 12:07
S116	2	"20020030871" and converter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 12:07
S117	0	"20020030871" and digital and microphone and reader	US-PGPUB; USPAT; USOCR; FPRS; EPO;	OR	OFF	2015/05/13 12:08

			JPO; DERWENT; IBM_TDB			
S118	4	"7918394".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 12:09
S119	1	"6481623".pn. and network	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/13 16:21
S120	0	"6481623".pn. and network	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:21
S121	0	"6481623".pn. and internet	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:21
S122	0	"6481623".pn. and lan	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:21
S123	0	"6481623".pn. and wan	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:22
S124	1	"6481623".pn. and line	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:22
S125	1	"6481623".pn. and bit	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:24
S126	1	"6481623".pn. and "0"	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:24
S127	1	"6481623".pn. and "0" and (circuit or chip)	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:26
S128	1	"6481623".pn. and "128"	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:29
S129	1	"6481623".pn. and "40"	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:30
S130	1	"6481623".pn. and S128	US-PGPUB; USPAT	OR	OFF	2015/05/13 16:30
S131	22	((digital to analog) or (a/d)) same converter same credit same data same reader same (microphone or audio or sound)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/14 10:11
S132	22	((digital to analog) or (d/a)) same converter same credit same data same reader same (microphone or audio or sound)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/14 10:13
S133	297	((digital to analog) or (d/a)) same credit same data same reader same (microphone or audio or sound)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	ON	2015/05/14 10:14

			DERWENT; IBM_TDB			
S134	297	((digital to analog) or (d/a)) same credit same data same reader same (microphone or audio or sound) same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/14 10:14
S135	2	(("digital to analog") or ("d/a")) same credit same data same reader same (microphone or audio or sound) same card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/14 10:16
S136	2	(("digital to analog") or ("d/a")) same credit same data same reader same (microphone or audio or sound)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/14 10:16
S137	2	(("digital to analog") or ("d/a")) same credit same data same (scanner or reader) same (mic or microphone or audio or sound)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/14 10:17
S138	1	(("digital to analog") or ("d/a")) same transaction same data same (scanner or reader) same (mic or microphone or audio or sound)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/14 10:17
S139	24	(convert or converting or conversion) same (("credit card") near2 (data or information)) same analog	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/14 10:47
S140	5	"20030076045"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/14 11:11
S141	3	"KR 20030076045"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/14 11:12
S142	0	"blue toot typed portable credit card reader"	US-PGPUB; USPAT; USOCR;	OR	OFF	2015/05/14 11:17

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S143	3	"blue tooth typed portable credit card reader"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/14 11:17
S144	4	"6607136".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/14 11:39
S145	2	"7761374".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/14 11:42
S146	14	"blue tooth" near2 "credit card"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/05/14 12:09
S147	14	"blue tooth" near2 "credit card"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/05/14 12:09

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BIB DATA SHEET

CONFIRMATION NO. 3697

SERIAL NUMBER	FILING or 371(c) DATE RULE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
14/636,674	03/03/2015	705	3694	P1987.02

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Ty Fellers, Little Mountain, SC;

**** CONTINUING DATA ***************************
This application is a CON of 14/524,842 10/27/2014 PAT 9003508
which is a CON of 11/533,030 09/19/2006 ABN
which claims benefit of 60/719,273 09/20/2005

**** FOREIGN APPLICATIONS ***************************

**** IF REQUIRED, FOREIGN FILING LICENSE GRANTED **** ** SMALL ENTITY **
03/12/2015

Foreign Priority claimed ☐ Yes ☑ No 35 USC 119(a-d) conditions met ☐ Yes ☑ No Verified and Acknowledged /MOHAMMAD Z SHAIKH/ Examiner's Signature	☐ Met after Allowance Initials	STATE OR COUNTRY	SHEETS DRAWINGS	TOTAL CLAIMS	INDEPENDENT CLAIMS
		CA	15	16	2

ADDRESS
CENTRAL COAST PATENT AGENCY, INC
3 HANGAR WAY SUITE D
WATSONVILLE, CA 95076
UNITED STATES

TITLE
Methods and Apparatus for Enabling Secure Network-Based Transactions

FILING FEE RECEIVED		
730	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

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14636674	COLNOT ET AL.
	Examiner	Art Unit
	MOHAMMAD Z SHAIKH	3694

CPC- SEARCHED		
Symbol	Date	Examiner
G06Q 20/3272	5/14/2015	/MZS/
G06Q 20/3278	5/14/2015	/MZS/

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner

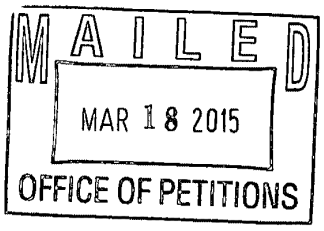
SEARCH NOTES		
Search Notes	Date	Examiner
EAST	5/14/2015	/MZS/

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner

UNITED STATES PATENT AND TRADEMARK OFFICE

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Alexandria, VA 22313-1450
www.uspto.gov

CENTRAL COAST PATENT AGENCY, INC
3 HANGAR WAY SUITE D
WATSONVILLE CA 95076



Doc Code: TRACK1.GRANT

Decision Granting Request for Prioritized Examination (Track I or After RCE)	Application No.: 14/636,674

1. THE REQUEST FILED 3/3/15 IS **GRANTED.**

The above-identified application has met the requirements for prioritized examination

A. ☒ for an original nonprovisional application (Track I).
B. ☐ for an application undergoing continued examination (RCE).

2. **The above-identified application will undergo prioritized examination.** The application will be accorded special status throughout its entire course of prosecution until one of the following occurs:

A. filing a **petition for extension of time** to extend the time period for filing a reply;
B. filing an **amendment to amend the application to contain more than four independent claims, more than thirty total claims**, or a multiple dependent claim;
C. filing a **request for continued examination**;
D. filing a notice of appeal;
E. filing a request for suspension of action;
F. mailing of a notice of allowance;
G. mailing of a final Office action;
H. completion of examination as defined in 37 CFR 41.102; or
I. abandonment of the application.

Telephone inquiries with regard to this decision should be directed to Cheryl Gibson-Baylor at (571)272-3213, Office of Petitions. In his/her absence, calls may be directed to Brian W. Brown, (571)272-5338.

Cheryl Gibson-Baylor
/Cheryl Gibson-Baylor/
[*Signature*]

Petitions Paralegal Specialist
(Title)

PATENT APPLICATION FEE DETERMINATION RECORD

Substitute for Form PTO-875

Application or Docket Number: 14/636,674

APPLICATION AS FILED - PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	SMALL ENTITY RATE($)	SMALL ENTITY FEE($)	OR	OTHER THAN SMALL ENTITY RATE($)	OTHER THAN SMALL ENTITY FEE($)
BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	70		N/A	
SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A	300		N/A	
EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	360		N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	16 minus 20 =	*	x 40 =	0.00	OR		
INDEPENDENT CLAIMS (37 CFR 1.16(h))	2 minus 3 =	*	x 210 =	0.00			
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	730		TOTAL	

APPLICATION AS AMENDED - PART II

		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	SMALL ENTITY RATE($)	SMALL ENTITY ADDITIONAL FEE($)	OR	OTHER THAN SMALL ENTITY RATE($)	OTHER THAN SMALL ENTITY ADDITIONAL FEE($)
AMENDMENT A	Total (37 CFR 1.16(i))	*	Minus	**	=	x =		OR	x =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	x =		OR	x =	
	Application Size Fee (37 CFR 1.16(s))									
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE($)	ADDITIONAL FEE($)	OR	RATE($)	ADDITIONAL FEE($)
AMENDMENT B	Total (37 CFR 1.16(i))	*	Minus	**	=	x =		OR	x =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	x =		OR	x =	
	Application Size Fee (37 CFR 1.16(s))									
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	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.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
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APPLICATION NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY.DOCKET.NO	TOT CLAIMS	IND CLAIMS
14/636,674	03/03/2015	2876	730	P1987.02	16	2

CONFIRMATION NO. 3697

24739
CENTRAL COAST PATENT AGENCY, INC
3 HANGAR WAY SUITE D
WATSONVILLE, CA 95076

FILING RECEIPT



Date Mailed: 03/16/2015

Receipt is acknowledged of this non-provisional 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 APPLICANT, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. **If an error is noted on this Filing Receipt, please submit a written request for a Filing Receipt Correction. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections**

Inventor(s)

Vincent Cedric Colnot, Milpitas, CA;
Ty Fellers, Little Mountain, SC;

Applicant(s)

OHVA, Inc., San Jose, CA

Power of Attorney: The patent practitioners associated with Customer Number 24739

Domestic Priority data as claimed by applicant

This application is a CON of 14/524,842 10/27/2014
which is a CON of 11/533,030 09/19/2006 ABN
which claims benefit of 60/719,273 09/20/2005

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.

Permission to Access - A proper **Authorization to Permit Access to Application by Participating Offices** (PTO/SB/39 or its equivalent) has been received by the USPTO.

If Required, Foreign Filing License Granted: 03/12/2015
The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 14/636,674**
Projected Publication Date: 06/25/2015
Non-Publication Request: No

Early Publication Request: No
** **SMALL ENTITY** **
Title

Methods and Apparatus for Enabling Secure Network-Based Transactions

Preliminary Class

235

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

PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at http://www.uspto.gov/web/offices/pac/doc/general/index.html.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, http://www.stopfakes.gov. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4258).

LICENSE FOR FOREIGN FILING UNDER

Title 35, United States Code, Section 184

Title 37, Code of Federal Regulations, 5.11 & 5.15

GRANTED

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign AssetsControl, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

NOT GRANTED

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

SelectUSA

The United States represents the largest, most dynamic marketplace in the world and is an unparalleled location for business investment, innovation, and commercialization of new technologies. The U.S. offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to promote and facilitate business investment. SelectUSA provides information assistance to the international investor community; serves as an ombudsman for existing and potential investors; advocates on behalf of U.S. cities, states, and regions competing for global investment; and counsels U.S. economic development organizations on investment attraction best practices. To learn more about why the United States is the best country in the world to develop technology, manufacture products, deliver services, and grow your business, visit http://www.SelectUSA.gov or call +1-202-482-6800.

Doc Code: TRACK1.REQ
Document Description: **TrackOne Request**

PTO/AIA/424 (03-13)

CERTIFICATION AND REQUEST FOR PRIORITIZED EXAMINATION UNDER 37 CFR 1.102(e) (Page 1 of 1)

First Named Inventor:	Vincent Cedric Colnot	Nonprovisional Application Number (if known):	
Title of Invention:	Methods and Apparatus for Enabling Secure Network-Based Transactions		

APPLICANT HEREBY CERTIFIES THE FOLLOWING AND REQUESTS PRIORITIZED EXAMINATION FOR THE ABOVE-IDENTIFIED APPLICATION.

1. The processing fee set forth in 37 CFR 1.17(i)(1), the prioritized examination fee set forth in 37 CFR 1.17(c), and if not already paid, the publication fee set forth in 37 CFR 1.18(d) have been filed with the request. The basic filing fee, search fee, examination fee, and any required excess claims and application size fees are filed with the request or have been already been paid.

2. The application contains or is amended to contain no more than four independent claims and no more than thirty total claims, and no multiple dependent claims.

3. The applicable box is checked below:

I. ☑ Original Application (Track One) - Prioritized Examination under § 1.102(e)(1)

i. (a) The application is an original nonprovisional utility application filed under 35 U.S.C. 111(a). This certification and request is being filed with the utility application via EFS-Web.

---OR---

(b) The application is an original nonprovisional plant application filed under 35 U.S.C. 111(a). This certification and request is being filed with the plant application in paper.

ii. The executed inventor's oath or declaration is filed with the application. (37 CFR 1.63 and 1.64)

II. ☐ Request for Continued Examination - Prioritized Examination under § 1.102(e)(2)

i. A request for continued examination has been filed with, or prior to, this form.
ii. If the application is a utility application, this certification and request is being filed via EFS-Web.
iii. The application is an original nonprovisional utility application filed under 35 U.S.C. 111(a), or is a national stage entry under 35 U.S.C. 371.
iv. This certification and request is being filed prior to the mailing of a first Office action responsive to the request for continued examination.
v. No prior request for continued examination has been granted prioritized examination status under 37 CFR 1.102(e)(2).

Signature /Donald R. Boys/	Date 03/03/2015
Name (Print/Typed) Donald R. Boys	Practitioner Registration Number 35074

***Note**: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4(d) for signature requirements and certifications. Submit multiple forms if more than one signature is required.**

☐ *Total of _____ forms are submitted.

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.

PTO/AIA/14 (11-13)
Approved for use through 01/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	P1987.02
	Application Number	
Title of Invention	Methods and Apparatus for Enabling Secure Network-Based Transactions	

The application data sheet is part of the provisional or nonprovisional 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.
This document may be completed electronically and submitted to the Office in electronic format using the Electronic Filing System (EFS) or the document may be printed and included in a paper filed application.

Secrecy Order 37 CFR 5.2

☐ Portions or all of the application associated with this Application Data Sheet may fall under a Secrecy Order pursuant to 37 CFR 5.2 (Paper filers only. Applications that fall under Secrecy Order may not be filed electronically.)

Inventor Information:

Inventor 1 Remove

Legal Name

Prefix	Given Name	Middle Name	Family Name	Suffix
	Vincent	Cedric	Colnot	

Residence Information (Select One) ◉ US Residency ○ Non US Residency ○ Active US Military Service

City	Milpitas	State/Province	CA	Country of Residence i	US

Mailing Address of Inventor:

Address 1	803 Kevenaire Drive		
Address 2			
City	Milpitas	State/Province	CA
Postal Code	95035	Country i	US

Inventor 2 Remove

Legal Name

Prefix	Given Name	Middle Name	Family Name	Suffix
	Ty		Fellers	

Residence Information (Select One) ◉ US Residency ○ Non US Residency ○ Active US Military Service

City	Little Mountain	State/Province	SC	Country of Residence i	US

Mailing Address of Inventor:

Address 1	1970 Mill Road		
Address 2			
City	Little Mountain	State/Province	SC
Postal Code	29075	Country i	US

All Inventors Must Be Listed - Additional Inventor Information blocks may be generated within this form by selecting the **Add** button. Add

Correspondence Information:

Enter either Customer Number or complete the Correspondence Information section below.
For further information see 37 CFR 1.33(a).

PTO/AIA/14 (11-13)
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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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Application Data Sheet 37 CFR 1.76	Attorney Docket Number	P1987.02
	Application Number	
Title of Invention	Methods and Apparatus for Enabling Secure Network-Based Transactions	

☐ An Address is being provided for the correspondence Information of this application.			
Customer Number	24739		
Email Address	info@centralcoastpatent.com	Add Email	Remove Email

Application Information:

Title of the Invention	Methods and Apparatus for Enabling Secure Network-Based Transactions		
Attorney Docket Number	P1987.02	**Small Entity Status Claimed**	☒
Application Type	Nonprovisional		
Subject Matter	Utility		
Total Number of Drawing Sheets (if any)	15	**Suggested Figure for Publication (if any)**	

Publication Information:

☐ Request Early Publication (Fee required at time of Request 37 CFR 1.219)
☐ **Request Not to Publish.** I hereby request that the attached application not be published under 35 U.S.C. 122(b) and certify that the invention disclosed in the attached application **has not and will not** be the subject of an application filed in another country, or under a multilateral international agreement, that requires publication at eighteen months after filing.

Representative Information:

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).
Either enter Customer Number or complete the Representative Name section below. If both sections are completed the customer Number will be used for the Representative Information during processing.

Please Select One:	◉ Customer Number	○ US Patent Practitioner	○ Limited Recognition (37 CFR 11.9)
Customer Number	24739		

Domestic Benefit/National Stage Information:

This section allows for the applicant to either claim benefit under 35 U.S.C. 119(e), 120, 121, or 365(c) or indicate National Stage entry from a PCT application. Providing this 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.
When referring to the current application, please leave the application number blank.

Prior Application Status	Pending		Remove
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)
	Continuation of	14524842	2014-10-27
Prior Application Status	Pending		Remove

PTO/AIA/14 (11-13)
Approved for use through 01/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	P1987.02
	Application Number	
Title of Invention	Methods and Apparatus for Enabling Secure Network-Based Transactions	

Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)
14524842	Continuation of	11533030	2006-09-19
Prior Application Status	Expired		Remove
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)
11533030	Claims benefit of provisional	60719273	2005-09-20
Additional Domestic Benefit/National Stage Data may be generated within this form by selecting the **Add** button.			Add

Foreign Priority Information:

This section allows for the applicant to claim priority to a foreign application. 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(d). When priority is claimed to a foreign application that is eligible for retrieval under the priority document exchange program (PDX) [i] the information will be used by the Office to automatically attempt retrieval pursuant to 37 CFR 1.55(h)(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).

Remove

Application Number	Country [i]	Filing Date (YYYY-MM-DD)	Access Code [i] (if applicable)

Additional Foreign Priority Data may be generated within this form by selecting the **Add** button. Add

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

☐ 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 16, 2013, will be examined under the first inventor to file provisions of the AIA.

Authorization to Permit Access:

☒ Authorization to Permit Access to the Instant Application by the Participating Offices

PTO/AIA/14 (11-13)
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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	P1987.02
	Application Number	
Title of Invention	Methods and Apparatus for Enabling Secure Network-Based Transactions	

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Name of the Deceased or Legally Incapacitated Inventor :

If the Applicant is an Organization check here. ☒

Organization Name	OHVA, Inc.		
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Application Data Sheet 37 CFR 1.76	Attorney Docket Number	P1987.02
	Application Number	
Title of Invention	Methods and Apparatus for Enabling Secure Network-Based Transactions	

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First Name	Donald	Last Name	Boys	Registration Number	35074

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	Application Number	
Title of Invention	Methods and Apparatus for Enabling Secure Network-Based Transactions	

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ASSIGNMENT-STATEMENT (1987.01)

This Declaration and Assignment is directed to the invention: **Methods and Apparatus for Enabling Secure Network-Based Transactions**

I, **Ty Fellers**, believe I am the original inventor or an original joint inventor of a claimed invention in the application; and the application for the invention was made or was authorized to be made by me. 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.

For good and valuable consideration, receipt of which is hereby acknowledged, I, **Ty Fellers**, do hereby sell, assign and transfer unto the **OHVA, Inc.**, (having its principal place of business **945 Whitehall Ave, San Jose, CA 95128**, hereinafter called the "Assignee"), its successors and assigns, the entire world-wide title, interest and right, including the right of priority controlled by me, in, to and under Letters Patent of the United States, the patent application, docket number **1987.01**, which bears application serial number _____, filed _____, ("I hereby authorize and request the agent(s) of record under customer number 24739, Central Coast Patent Agency, Inc., 3 Hangar Way, Suite D, Watsonville, CA 95076, to insert above the serial number and filing date of said application when known"), and the invention and any of them therein set forth and described, and any and all Letters Patent of the United States and of countries foreign thereto which may be granted thereon or therefore based on the original application for said U.S. Letters Patent, and all divisions, reissues, substitutions, continuations, and extensions thereof which may be granted relating thereto in any country; **and**

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United States and in any country foreign thereto, and to cooperate and assist in the prosecution of appeal and interference proceedings involving said inventions and in the adjudication or re-examination of said Letters Patent provided the expenses which may be incurred by me in lending such cooperation and assistance be paid by the Assignee.

For the additional consideration of one dollar ($1), receipt of which is hereby acknowledged, I, **Ty Fellers**, do hereby sell, assign and transfer unto the **OHVA, Inc.**, any residual rights, including all moral rights, related to the patent application, docket number **1987.01**, which bears application serial number _____, filed _____, the invention and any of them therein set forth and described, and any and all Letters Patent of the United States and of countries foreign thereto which may be granted thereon or therefore based on the original application for said U.S. Letters Patent, and all divisions, reissues, substitutions, continuations, and extensions thereof which may be granted relating thereto in any country.

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Ty Fellers — **Ty Fellers**

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SUBSTITUTE STATEMENT IN LIEU OF AN OATH OR DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (35 U.S.C. 115(d) AND 37 CFR 1.64)

Title of Invention	Methods and Apparatus for Enabling Secure Network-Based Transactions

This statement is directed to:

☒ The attached application,

OR

☐ United States application or PCT international application number _____ filed on _____.

LEGAL NAME of inventor to whom this substitute statement applies:

(*E.g.*, Given Name (first and middle (if any)) and Family Name or Surname)

Vincent Cedric Colnot

Residence (except for a deceased or legally incapacitated inventor):

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Milpitas	CA	US

Mailing Address (except for a deceased or legally incapacitated inventor):

803 Kevenaire Drive

City	State	Zip	Country
Milpitas	CA	95035	US

I believe the above-named inventor or joint inventor to be the original inventor or an original joint inventor of a claimed invention in the application.

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

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

Relationship to the inventor to whom this substitute statement applies:

- ☐ Legal Representative (for deceased or legally incapacitated inventor only),
- ☒ Assignee,
- ☐ Person to whom the inventor is under an obligation to assign,
- ☐ Person who otherwise shows a sufficient proprietary interest in the matter (petition under 37 CFR 1.46 is required), or
- ☐ Joint Inventor.

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- ☐ Inventor is under legal incapacity,
- ☒ Inventor cannot be found or reached after diligent effort, or
- ☐ Inventor has refused to execute the oath or declaration under 37 CFR 1.63.

If there are joint inventors, please check the appropriate box below:

- ☒ An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) naming the entire inventive entity has been or is currently submitted.

OR

- ☐ An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) has not been submitted. Thus, a Substitute Statement Supplemental Sheet (PTO/AIA/11 or equivalent) naming the entire inventive entity and providing inventor information is attached. See 37 CFR 1.64(b).

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PERSON EXECUTING THIS SUBSTITUTE STATEMENT:

Name: Mike Angelinovich	Date (Optional):

Signature: Mike Angelinovich

APPLICANT NAME AND TITLE OF PERSON EXECUTING THIS SUBSTITUTE STATEMENT:

If the applicant is a juristic entity, list the applicant name and the title of the signer:

Applicant Name: OHVA, Inc.

Title of Person Executing This Substitute Statement: CEO

The signer, whose title is supplied above, is authorized to act on behalf of the applicant.

Residence of the signer (unless provided in an application data sheet, PTO/AIA/14 or equivalent):

City	State	Country

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METHODS AND APPARATUS FOR ENABLING SECURE NETWORK-BASED TRANSACTIONS

CROSS-REFERENCE TO RELATED APPLICATIONS

The present invention claims is a Continuation of US application 14/524,842 filed October 27, 2014, which was a continuation of US application 11/533,030, filed 09/19/2006, which claims priority to a U.S. provisional patent application serial number 60/719,273 filed on 09/20/2005. The referenced applications are incorporated herein at least by reference.

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention is in the field of electronic transactions carried out over a network connection and pertains particularly to methods and apparatus for ensuring identity security for the transaction parties.

2. Discussion of the State of the Art

Integrated circuit cards, commonly referred to as smart cards, are widely used in stores to secure electronic payments. The online market has not adopted smart cards, although they provide the best security to conduct electronic commerce. The main reasons are the high cost of the card reader and the complexity of the system for most people. Not only a card but also a reader must be provided to the millions of potential end-users who comprise this market base.

The inventor is aware of a method and apparatus to secure online transactions on the Internet. The system includes a smart card transmitting an identification sequence to a **PC** in the form of a modulated signal, a card reader plugged into the microphone input

of the **PC** sound card, and a **PC** applet demodulating the identification sequence. The card reader is characterized by the absence of processing means.

The inventor is also aware of a secure memory device for a smart card with a modem interface. The secure memory includes a rewritable memory such as an EEPROM, a processing unit or a microprocessor, an on-chip oscillator, an ISO 7816 interface, and a one-wire modem interface. The memory is characterized in that both communication interfaces are bi-directional and share the same terminal. The modem interface is exchanging data with the host in the form of a modulated signal by means of a card reader characterized by the absence of processing means.

The inventor is further aware of a method and apparatus to secure online transactions over the phone. The method includes a smart card transmitting an identification sequence to an IVR server in the form of a modulated signal, a card reader plugged into the telephone line, and an IVR applet demodulating the identification sequence. The card reader is characterized by the absence of processing means.

What is clearly needed is improved and more secure client/server methods including transmission packaging of secure authentication over a network aided in some case by user-friendly peripherals and devices for performing secure transactions over a data-packet-network.

BRIEF SUMMARY OF THE INVENTION

In one embodiment of the invention an apparatus is provided, comprising a transaction card bearing data and having an output interface capable of transmitting the data, a card reader having an input interface enabled to accept the data from the output interface of the transaction card, conversion circuitry converting the card data to an analog modulated signal, and an output pin from the card reader adapted to engage in a microphone port of a computerized appliance, the output pin providing the analog modulated signal to the port, and thence to the computerized appliance.

In one embodiment of the apparatus the computerized appliance is enabled to communicate on a network, and has sound conversion circuitry converting the analog modulated signal to digital data. Also in one embodiment the computerized appliance comprise a processor executing coded instructions from a non-transitory medium, and the coded instruction executed by the processor cause the data to be used in a communication on the network. Also in one embodiment the transaction card comprises an electronic chip having a digital memory, and the card value is stored as a sequence of bits in the digital memory. In one embodiment the analog modulated signal is derived from the card value stored in the digital memory.

In one embodiment the conversion circuitry is a part of the circuitry of the electronic chip. Also in one embodiment the coded instructions provide two-way communication with a server hosted by a financial institution or an on-line merchant, and the two-communication facilitate transactions by an owner of the card with the financial institution or purchases by the owner of the card with an on-line merchant. And in one embodiment the coded instructions operate to accept a card verification code (CVV) in the card data, to use the CVV in the purchases or transactions, and for each transaction or purchase accomplished, a new CVV is created and stored in the card data.

In another aspect of the invention a method is provided, comprising coupling a transaction card bearing data and having an output interface capable to transmit the data to a card reader having an input interface enabled to accept the data from the output interface of the transaction card, converting the card data to an analog modulated signal by conversion circuitry, and providing the analog modulated signal by an output pin from the card reader engaged in a microphone port of a computerized appliance, to the computerized appliance.

In one embodiment of the method the computerized appliance communicates on a network, and has sound conversion circuitry converting the analog modulated signal to digital data. Also in one embodiment the computerized appliance executes coded instructions on a processor from a non-transitory medium, and the coded instruction executed by the processor cause the data to be used in a communication on the network.

Also in one embodiment the transaction card comprises an electronic chip having a digital memory, and the card value is stored as a sequence of bits in the digital memory. And in one embodiment the analog modulated signal is derived from the card value stored in the digital memory.

In still another embodiment of the method the conversion circuitry is a part of the circuitry of the electronic chip. In one embodiment the coded instructions provide two-way communication with a server hosted by a financial institution or an on-line merchant, and the two-communication facilitate transactions by an owner of the card with the financial institution or purchases by the owner of the card with an on-line merchant. And in one embodiment the coded instructions operate to accept a card verification code (CVV) in the card data, to use the CVV in the purchases or transactions, and for each transaction or purchase accomplished, a new CVV is created and stored in the card data.

BRIEF DESCRIPTION OF THE DRAWING FIGURES

Fig. 1 is a block-diagram illustrating a secure transmission package of a secure identification number and session key according to an embodiment of the invention.

Fig. 2 is an architectural overview of interaction between a user and an authentication server according to an embodiment of the present invention.

Fig. 3 is an architectural overview of interaction using the system of the invention according to another embodiment of the present invention.

Fig. 4 is a block diagram illustrating basic electronics of a key jack sound pass generator according to an embodiment of the present invention.

Fig. 5 is a plan view of design options for a key jack signal generator according to embodiments of the present invention.

Fig. 6 is a block-diagram illustrating basic electronics of a smart card signal generator coupled to a card reader according to another embodiment of the present invention.

Fig. 7 is an architectural overview of interaction using the system of the invention including authentication server and a mobile device for signal generation according to yet another embodiment of the present invention.

Fig. 8 is a block diagram illustrating user authentication and generation of a new session key by the token for use according to an embodiment of the present invention.

Fig. 9 is a block diagram illustrating user authentication and update to a sound file token and a server-transmitted session key according to an embodiment of the present invention.

Fig. 10 is a block diagram illustrating user authentication and a method for generating a new session key for a user according to another embodiment of the present invention.

Fig. 11 is a block diagram illustrating user authentication using a card verification value (CVV) code according to yet another embodiment of the invention.

Fig. 12 is a block diagram illustrating user account activation on a server according to an embodiment of the present invention.

Fig. 13 is a block diagram illustrating user authentication using a password as a session key according to yet another embodiment of the invention.

Fig. 14 is a process flow chart illustrating acts for creating a soft token for authentication for a user according to embodiments of the present invention.

Fig. 15 is a process flow chart illustrating acts for retrieving or activating a soft token for authentication according to embodiments of the present invention.

DETAILED DESCRIPTION

The inventors provide a system that may be used in a variety of ways using hardware and/or software to provide secure authentication over a network for users and user groups. The present invention is described according to various embodiments and in enabling detail supporting each of those embodiments. More particularly, the system uses

a modulated sound consisting at least in part of an identification number and a session key.

It is important to note herein that in one embodiment, the identification number may, for example, contain 16 digits of data and may be a fixed identification number (ID) or on that is dynamically assigned. It may also be encoded to include an error detection bit. In this case the identification number may also be encrypted with a proprietary key to ensure the provider authorized to provide the software of the invention may practice the invention in a way that is functional.

The following example demonstrates a configuring and encryption of a 16-digit ID number for use according to an embodiment of the invention. The ID number may contain fewer or more than 16 digits. The number 16 is exemplary. ID number = 1 2 3 4 5 6 7 8 9 0 0 1 2 3 4 5: The 16 digits are grouped into 8 decimal numbers value from 00-99 and these are 12, 34, 56, 78, 90, 01, 23, and 45. Each of the decimal numbers are converted into hexadecimal numbers value from $00-$63 and these are $0C, $22, $B8, $4E, $5A, $81, $17, $2D. The most significant bit of each byte of data is reserved for storing an error detection or parity bit. The string of hexadecimal values after conversion is $0C, $22, $B8, $4E, $5A, $81, $17, and $2D.

The ID number is then encrypted by adding an exclusive logical operator (XOR) that in this example is a proprietary 8-byte applet key. An example of the applet key is $99, $AA, $BB, $CC, $DD, $EE, $FF, $55. The resulting encrypted ID string is $95, $88, $03, $82, $87, $6F, $E8, $78. In this example, a session key is provided to generate a hash of the user password. The hashed password is valid only for one session.

In a variation of this embodiment, a new session key is generated each time a user attempts authentication and the user token is activated. An iterative algorithm [Ci+1 = G (N, S, Ci)] is used to generate a new key. G= a one way function such as one based on a stream cipher, an encryption method that works on a continuous stream of data rather than individual data blocks. N= the client or user ID number described above whether encrypted or not. S= a proprietary seed known only to the issuer. Ci= the current session key. The session key may be 8 bytes or longer depending on the token capabilities. The

inventor provides the above information for clarity relative to encryption methods only that are described in detail further below according to several embodiments. Other variants may be used without departing from the spirit and scope of the present invention. However, the function of a two factor authentication where one factor is an identification number and the other is a modulated sound is important in several aspects of the present invention as will be seen further below.

Fig. 1 is a block-diagram illustrating a secure transmission package 100 of a secure identification number and session key according to an embodiment of the invention. Package 100 represents an encoded and sound modulated transmission carrying a data payload 101 including a secure identification number 102 and a session key 103 comprising 2 data frames. Package 100 includes a protocol layer 104, an encoding layer 105, and a sound modulation layer 106. Package 100 is assembled at a client-operated personal computing appliance (PC) and is transmittable over a data-packet-network such as a local area network (LAN) or a wide area network (WAN) where it is decipherable at the other end, typically at a server adapted to authenticate secure access to some network-based resource.

Data payload 101 includes ID number 102, typically in an encrypted state. However, encryption of ID number 102 is not specifically required in order to practice the present invention. Session key 103 is used to encrypt a user password and is a unique key provided by a key issuer. A session key may be a dynamic key good only for one session as described further above. However, in some cases it may be a static key good for more than one session.

ID number 102 and Session key 103 are embedded into protocol layer 104 each chunk of data starts with a flag byte indicating the type of data enclosed and ends with a cyclical redundancy-checking (CRC) bit for transmission error detection comprising a data frame of a data type. The data frames carrying the ID number and session key are encoded with encoding breaks.

In this example, the frames are encoded using a Miller code known to the inventors. This encoding creates transitions every 1 elementary time unit (etu), every 1.5

etus, and every 2 etus even if the data doesn't change. Any other known code could be used in place of the Miller code, although other codes might create more transitions. The Manchester code for instance creates transitions every 0.5 etu and every 1 etu.

The encoding process in this example transmits the data (ID number and session key) and bit clock together in a same signal. The flag byte contains an encoding break, which is a longer time without data transition (3 etu for instance), signaling the beginning of a frame.

In this embodiment, the encoded bit flow is modulated as demonstrated by modulation layer 106 using a frequency-shift keying (FSK) modulation technique creating an analog waveform for representing logic 1 and another for representing logic 0 each wave form at different frequencies. The FSK modulation of the data is performed by a soft modem that is provided in an applet downloaded to a client practicing the present invention. The modem generates an audible sound compatible with PC sound card capabilities. The modulation frequency may be in the range of 0 Hz to 20 kHz for PC server application or in the range of 300 Hz to 3 kHz, which is compatible with telephone networks (wired and mobile). The modulated signal is demodulated by an FSK modem at the server.

Fig. 2 is an architectural overview 200 of interaction between a user and an authentication server according to an embodiment of the present invention. Overview 200 includes an authentication server adapted to authenticate a user 203 for access to a secure resource. Server 201 may be any type of server including a transaction portal authenticating transaction for a group of web merchants or banks. It may also be any server adapted to handle secure transactions for individuals. The server may simply provide secure login services to a secure area instead of enabling transactions. A secure authentication may be for the purpose of authentication one or more transactions or for granting network access to one or more than one secure resource. Likewise one server may perform both secure login services and secure transaction services.

In this example, user 203 is operating a PC having a network connection to server 201 over a network 202. Network 202 may be an Internet network, an Intranet network,

or a wireless telephone network without departing from the spirit and scope of the present invention. In this example, to be authenticated user 203 has a password or personal identification number (PIN) and a token that generates a session key that is useable only once in this embodiment.

Before practicing the invention for the first time, user 203 receives an applet from server 201. The applet contains a modem and a session key issued by the server. The modem demodulates and decodes the signal and includes an encryption algorithm for handling the challenge/response interaction between the user and server. In this example, user 203 enters a password or pin code locally and inserts the sound token, which generates the modulated sound into an audio input on the PC. The session key automatically encrypts the password or PIN ensuring a permanent password encryption state meaning that the password or PIN is never transmitted over the network to the server in a clear or unencrypted state.

In this example user 203 is not required to enter a username. Server 201 sends the correct user name when it receives the correct ID number from the token on the client PC. Only a valid server can send the correct user name. Therefore user 203 is entering his password safely and securely.

Fig. 3 is an architectural overview 300 of interaction using the system of the invention according to another embodiment of the present invention. Overview 300 includes authentication server 201, network 202 and user 203 having the same description and element numbers introduced in the description of Fig. 2 above. In this example user authentication is demonstrated.

In this embodiment the applet on PC 203 generates a hash code based on the session key, challenge, and password. The challenge is a random number generated by server 201 for each transaction that requires authentication. Access is granted to the user operating PC 203 if the server authenticates the hash code, which is sent from the PC to the server over the network.

The hash code is the session key in this example. As the session key, the hash code is valid only once. The hash code is also the server challenge in this example. As

the server challenge, the hash code is valid for a short period of time. In this embodiment server 201 deduces the current session key referred to herein for discussion purposes as (Ci) from the last session key used, which is stored at the server. The previous session key is referred to herein for discussion purposes as (Ci-1) or as (Co) in some embodiments is stored in the server database.

Server 201 generates a hash code of the user password stored at the server using the session key. In this example, server 201 compares the hash of the user password to the hash received. The user is authenticated for a transaction if both hash codes are identical. This indicates that both PC 203 and server 201 have used the same session key and password. In this case, server 201 stores (Ci-1) by (Ci) in the database and (Ci) cannot then be reused. In this interaction an ID number sent to server 201. The server sends a username challenge. The username challenge is sent in the form of a hash back to PC 203. The PC sends a hash code derived from the demodulated token parameters back to server 201. The server, in the meantime generates its own hash code and when the server receives the client response, a comparison of the hash codes is performed. If the hash codes are identical, the user is granted access or otherwise is validated as the correct user authorized to complete the transaction during the current session.

In a preferred embodiment, the sound signal or sound pass, as referred to by the inventor and illustrated herein as sound pass 205 in Figs. 2 and 3, may be provided in at least three system compatible forms. In fact any hardware device capable of playing a sound may be incorporated as a sound pass token. Therefore, the token may be a hardware device or a software file (soft form) like a Wav file for instance. One device that is disclosed herein and that may serve as a sound pass token is a smart card used in conjunction with a card reader. Another device that may be used as a sound pass token is a unique key device termed a key jack by the inventor. The key jack may be adapted to be inserted into any "audio in" line on a PC such as the microphone port, telephone jack, or any auxiliary port having connection directly or indirectly to the sound card on the PC. The key jack is manipulated to play the modulated sound pass by pressing a button provided on the device when the device is properly inserted into the PC. The applet on

the PC makes use of the sound pass token, demodulating the signal and generating the hash code for send to the authentication server.

Yet another compatible sound token is soft version in the form of a sound file deliverable from a mobile device like a cell phone, a personal digital assistant, or a handheld music player such as a Sony music player or an Ipod™. As long as the sound file can be input into the PC and recognized by the applet running on the PC the present invention can be practiced successfully.

Fig. 4 is a block diagram illustrating basic electronics 400 of a key jack sound pass generator according to an embodiment of the present invention. In one embodiment a semiconductor chip installed enclosed in a hand-held device like a key jack discussed above that plugs into the microphone input or other line input on a PC generates the sound pass signal. In one embodiment, the key jack may be plugged into the sound input or headset connector jack associated with a mobile smart telephone or PDA enabling authentication through a telephone network.

In this example, chip circuitry 400 includes an electrically erasable programmable read-only memory (EEPROM) 401. In one embodiment, a re-writable flash memory may be used. A modem circuit 406, an on-chip oscillator 405, a processing unit 409, and a serial input interface 408.

A tip/ring interface for plugging into a microphone jack or other line in is illustrated in reference to the chip circuitry and electrical paths. Chip 400 derives its voltage power from a sound card that provides from +3 to +5V direct current (DC). A testing interface 410 is provided on chip 400 for the purpose of enabling remote access to the chip for erasing and reprogramming and testing. All components on the chip are accessible or may at least be tested through interface 408 without removing the chip from its host. Processing unit 409 may be a small microprocessor. Testing interface 410 includes a connection to power and a connection to ground. A sound pass file may be stored on chip 400 in EEPROM 407 for use as a sound pass token. The file may be any suitable compression format including MP4, Wav, AVI, or others. Modem 406 and

oscillator 405 generate the signal in the form of sine waves that are demodulated by a modem provided in the applet on the users PC.

The applet is, of course running when the sound pass token is input for authentication using a key jack. The resistor adapts the impedance between the chip 401 and the microphone or other input. Switch 404 activates the modem 406, which in turn generates the modulated sound pass or signal input to the sound card on the PC. A user pushing a button, switch, or other mechanism on the external surface of the device hosting the chip operates or activates the modem to deliver the modulated sound one time. Test interface 410 is a bi-directional interface. As a mobile device key jack 400 may be used at virtually any PC station or if so adapted any mobile device capable of a bi-directional network connection. Therefore, a user may perform a secure login without physically using a clear text password or username that might later be revealed through a key logger program or the like.

Fig. 5 is a plan view of design options for a key jack signal generator according to embodiments of the present invention. In this example, the circuitry described above is housed within a convenient and mobile key jack device that can be worn around a user's neck or may be placed on a key ring for convenience. A key jack design 501 is illustrated in both a top view and in a side view. Device 501 includes a tip interface 508 adapted to fit into a microphone input on a PC or other computing appliance. The ring interface is illustrated herein as ring 509. In one embodiment another plug interface may be used instead such as a telephone jack or other line in design capable of transmitting audio in to pass the signal into the computing appliance. Device 501 includes the sleeve illustrated in the device to the right as sleeve 510 functioning as ground.

In this case, device 501 is molded from a durable polymer and includes an activation switch in the form of a button 505. A user may insert device 501 into a microphone input and depress button 505 to close switch 404 described further above thereby activating the modem to generate and modulate the sound pass signal. The sound pass signal contains the ID number and session key embedded in the modulated sound.

Key jack device 501 may be updated to change token parameters dynamically through the test interface. Optionally, other designs may be provided such as with a key jack device 503 illustrated in a position rotated 90 degrees from device 501. Device 503 has a user activation button 504 located at the end of the device opposite tip/ring and sleeve assembly 510 in which the sleeve 510 is numbered. A convenient ring attachment 507 provides an interface for attaching the same to a rope or key ring. Device 503 has an alternate shape than device 501. There are many variant design options available.

Fig. 6 is a block-diagram 600 illustrating basic electronics of a smart card signal generator 601 coupled to a card reader 602 according to another embodiment of the present invention. Diagram 600 includes a smart card 601 with the sound pass chip embedded therein. The card plugs into card reader 602, which in turn is plugged into the microphone input of the host commuting appliance or other line input capable of carrying sound and directly or indirectly connected to the sound card on the computing appliance such as a PC.

The components of the chip are essentially identical to those describe in the example of Fig. 5 for the key jack circuitry. Therefore they shall retain the same element numbers and shall not be reintroduced. The difference in this implementation from that of the key jack implementation described above is that the chip 602 is removable from the card reader circuitry 602. In both cases of the smart card/reader and the key jack, the reader has no processing components. The microprocessor 409 is part of the chip. Another variation that separates the two described embodiments is that in this example, modem 406 and the serial interface 408 share the same international standards organization (ISO) contacts.

In still another embodiment of the present invention, a key jack or a smart card coupled to a card reader is not required to successfully practice the present invention. The token may instead be embodied as a sound file containing the ID number and session key that is simply stored on a PC hard drive or, in one embodiment on a USB flash drive or other removable media for better security. In the later case, the sound file token, which may be a wav file or other audio compression format, is entirely mobile (if stored on a

removable drive) and may be generated and stored on the removable drive by an applet downloaded to the host PC. It is important to note herein that a user may utilize the token at any station having the required network connection capabilities by plugging the removable drive containing the token into that station. An applet though would have to first be downloaded to that station for updating the session key in one embodiment.

In another embodiment however the applet may also be an executable stored on the same removable drive containing the token. For example, in a preferred embodiment the applet is a Java applet utilizing a java archive (JAR) including the token parameters and current session key. The applet and token parameters may be downloaded to a same removable media wherein session key updates are performed on the removable media instead of on the host appliance.

The only requirement of the host appliance is that it has a version Java installed and accessible to the network browser that recognizes the applet and JAR file on the removable media such as a re-writable (RW) compact disc (CD) or a flash drive. In this embodiment, extensions may be created to enable older versions of Java installed on older operating systems to recognize the Java applet and JAR file. In this way no initial download of an applet is required of the host PC.

The server may dynamically send a new session key upon connection established thereto by the host PC. The session key may be downloaded directly onto the removable media and the applet already on the removable media may automatically update the token for next use. In this way a user may perform a secure transaction from any host station running a compatible version of java or an older version of Java adapted by extension to recognize the latter version applet and JAR file. Moreover, the transaction may occur in a secure manner leaving no trace of the activity on the host PC.

In one embodiment using a sound file, the sound file may be updated by a PC-based applet, which includes a FSK modem generating the modulated signal based on a new session key received from the server. Alternatively, the sound file is updated by the server during a session with the host PC periodically lie every week or month. This is a

static or quasi-static implementation of the system since the same session key is used for several authentications instead of being valid only for one authentication.

Fig. 7 is an architectural overview 700 of interaction using the system of the invention including authentication server 201 and a mobile device 701 for signal generation according to yet another embodiment of the present invention. As described above, in one embodiment a sound file may serve as the token that includes the user ID number and session key as previously described.

In this example, a modulated audio signal is generated by a sound-generating applet installed on and executable from mobile device 701, which is a smart phone in this example. In another embodiment, phone 701 may instead be a PDA or a hand-held music player such as an Ipod™.

In one embodiment a user enters a password or PIN on the PC via the keyboard of the PC. The output speaker system of mobile device 701 may be leveraged to play the modulated sound pass into a microphone plugged into PC 203. The microphone is plugged into the sound card on PC 203. The server challenge is a hash of the user password and the PC response is the modulated sound pass sent to the PC from mobile device 701 acoustically.

In another embodiment, mobile device 701 may include a hardwire cable that connects the speaker or headset output to the microphone input accomplishing the same task of inputting the signal. A PC-based applet on the PC demodulates the sound pass signal and communicates with the server to authenticate the user. In this example, the token on the mobile device if a sound file may not be updated by a PC applet or by the server through the host PC. However, in one embodiment the sound file may be updated by the applet on the device if the server sends a new session key to the mobile device directly or by the server contacting the telephone directly and establishing a secure network session with the device to update the file.

Fig. 8 is a block diagram 800 illustrating user authentication and generation of a new session key by the token for use according to an embodiment of the present invention. The token in this example is a hardware token like a key jack or smart card.

The authentication process of the present invention may vary slightly according to the form of token used. This embodiment is applicable to the use of either a smart card or a key jack token host described further above.

In this example a client has a token 801 in the form of a key jack or smart card having the secure chip described in the circuitry diagrams above. Token 801 in this example includes the user ID number (N), a secret seed (S) provided by the authentication service, and a session key (Ci). Ci is the current session key stored on the token. In this case the token generates a new session key. A new session key that is generated by the token is expressed as Ci+1 which is = to a one-way function (G) of N, S, and Ci. Ci is the previous or current session key stored on the card, which may have been used in the last authenticated transaction made by the user. It is possible that Ci is a current key that has expired but was never used. The secrete seed (S) is a parameter issued to the client by the authentication entity or service and is known only to the issuing service. It is not specifically required in order to successfully practice the invention, but provides yet another enhancement to the hash code generation process.

At the server, an account belonging to the user is known. Server 802, which may be the authenticating entity, has stored therein parameters of the user account including N, a user password (PW), S, and record of the last session key (Co) used in an authentication. Co may or may not be the same key as Ci on the token. In this example the user token generates a new session key (Ci+1) for each subsequent secure transaction that requires authentication of the user. The server deduces the new session key from knowledge of the last-used session key in the same fashion as the token.

The user 803 has a password (PW) that is identical to the password recorded in the account data and that is the only parameter the user manually enters in this embodiment. The server has an application 804 that issues a server challenge among other tasks whenever the ID number (N) is submitted. The user sends N to the server, which identifies the user and the server sends back a sever challenge (Cs) back to the user. The server challenge has described further above may be a hash of the user ID number and password. An applet 805 generates an encrypted version (Hi) of the Ci and

PW using a symmetric-key encryption method known as the data encryption standard (DES) available to the inventor. Other methods are possible without departing from the spirit and scope of the present invention.

A Hash code is generated from Hi using the session key again (Ci), adding an xor function, and the server challenge (Cs), which may be hashed or not. The resulting hash code is divided in two and only one of the halves of the code is used as a client response (Lc) in this example that is sent to the server (Rc). The process of encryption and hashing ensues after the server challenge is received at the client because the server challenge is a variable of the final hash code sent back to the server.

As the process unfolds, the server generates its own hash codes using the exact same parameters that the client used with the aid of the software driver (DLL) the codes cached temporarily in a code library 806. Library 806 represents the processing environment that the server uses to temporarily store data and make hash comparisons to validate clients. In the server library 806, the hash code generated by the server is compared to the one received by the client. If the compared codes are identical, L'c=Lc, then it provides absolute assurance that the client and the server used the same session key and the same password.

Fig. 9 is a block diagram 900 illustrating user authentication and update to a sound file token 901 and a server-transmitted session key according to an embodiment of the present invention. In the last embodiment, the token at the client location generates a new session key. In this example, the server generates a new session key.

The client has a sound file token 901 located on a PC or on some external device like a cell phone, PDA, or other handheld device capable of playing the sound file. The current sound file has the user ID number and the last session key sent to the server at the last successful transaction that required authentication. At server side, the client account parameters defining account 902 are known and include N, PW, S, and Co as described with respect to Fig. 8 above.

In this case, a user 903 manually enters a password (PW) known only to the user and to the server. A server application 904 provides a server challenge and a new session

key transmission (Jc) to the applet running on the user PC. The server challenge is required by the applet running on the PC in this case to generate the proper hash code for return to the server as L'c and to obtain the new session key for use.

In this case, the server, within the library 906 generates a new session key after the correct identification number (N) is received from the client. The key is expressed in this case as Ci+1 and is derived from a one way function (G) of N, S, and Ci, or Ci+1=G(N,S,Ci). In library 906, the transmission (Jc) is the new session key encrypted with the last session key (Ci) or Jc= DES (Ci, Ci+1).

The server sends Jc and the server challenge (Cs) together in one transmission back the client. The client generates a first hash (H'i), which is an encryption of the new session key sent by the server and the password or H'I=DES (C'I+1,PW). The server performs an identical hash in the library or Hi=DES (Ci+1,PW).

The applet on the client generates a final hash code (H'c) which is an encryption of Hi and the server challenge using the received session key and adding an xor function or H'c=DES(Ci+1,Hi,xor,Cs). The server performs the same hash Hc=DES(Ci+1,Hi,xor,Cs). H'c then equals the client code to be compared with the server code. The client sends L'c to the server and stores C'I+1 (new session key) as Co (the last session key used). The last operation occurs after the client is successfully validated. L'c is compared to Lc at the server and if the hash codes are identical, authentication is successful.

Fig. 10 is a block diagram 1000 illustrating user authentication and a method for generating a new session key for a user 1003 according to another embodiment of the present invention. In this example, the token is a sound file stored on a device like a cell phone or a PDA and a sound applet 1001 is provided to the mobile device to perform the modulation, demodulation and encryption. The client token includes N, S, and Ci. The sound applet 1001 generates a new session key expressed as Ci+1, which is = to G(H,S,Ci) where G is a one-way function. The known account parameters of the client account 1002 stored by the server are N (ID number), PW (Password), S (Secrete Seed), and Co (Last Session Key) used by the client.

In this example, user 1003 enters a PIN code (Pc) and plays the modulated sound into the microphone input of the PC acoustically using the speaker system of the mobile device. In one embodiment, the mobile device may be cabled to the microphone input from the speaker output or headset output. The client account 1002 at the server domain includes the parameters N, Pc, S, and Co.

In this implementation the user entered PIN code is duplicated Rc=Pc‖Pc. A value Ei is generated and is an encryption of Ci and Rc or Ei=DES(Ci,Rc). Eventually, the PC applet 1005 creates an encryption code (Ec) that is the encryption of Ei and Cs using the session key (Ci) and adding an xor function. Expressed in this example, it is Ec=DES(Ci,Ei,xor,Cs). Ec is decrypted at the server using the session key stored in the account parameters.

Fig. 11 is a block diagram 1100 illustrating user authentication using a card verification value (CVV) code according to yet another embodiment of the invention. In this example, banks or other financial institutions deploy secure smart cards in the form of bank cards having the sound pass token chip embedded thereon. The cards are adapted as a variation of the smart card used with a card reader plugged into a microphone jack on the user PC as described further above.

In this example the token (bank card) includes the token parameters of N, S, and Ci where Ci is the current session key. N (ID number) is different than the issued card number in this example for better security, but it includes the ID of the card issuing entity and enables the bank to route the transaction along with the CVV number (3-digit number) using existing bank protocols. The client account 1102 includes the ID number (N), the secrete seed (S), the last session key used by the client (Co), and the client PIN code (Pc).

Like the smart card or key jack implementation described further above, the token generates the new session key expressed as Ci+1=G(N,S,Ci). The user may enter a PIN code (Pc) and then may perform a series of banking transactions by submitting transaction data B1-Bn. For each transaction, a new hash code (Hc) is generated by applet 1205 on the client PC. The final Hc is a dynamic card verification value (CVV) based on the

session key, the transaction data (b1-Bn) for the instant transaction, and the Pc. In this example, Hc=Lc, which is sent to the server for each transaction and must be verified for each transaction.

The server generates its own hash to determine L'c, which is compared to the received Hc Lc for each transaction wherein the authentication is defined by the compared hash codes being identical. In this example, the server hash operation occurs after the user has entered his or her PIN code and the instant transaction data for that session. Otherwise, the server would not have any knowledge of Bi-Bn and could not match the client hash.

One with skill in the art of encryption will appreciate and understand the multi step encryptions using the session key at the client and the parallel encryption performed at the server so that the final hash codes may be compared. The actual process never reveals any clear text data that could become compromised. In fact, in all of the embodiments of the invention, the server may store the user ID number Username, Password, PIN, etc in permanently encrypted format.

Fig. 12 is a block diagram 1200 illustrating user account activation on a server according to an embodiment of the present invention. An activation protocol is used for clients that are activating their accounts for the first time. The activation protocol automatically activates the system software on the server. In this example, the user 1203 enters his username (U) and password (PW). Token 1201 includes the issued ID number (N), the secrete seed (S), a current session key (Ci) and the token generates the new session key (Ci+1, which is a one way function (G)(N,S,Ci). In initial use, account 1202 includes the username (U) in addition to N, PW, S, and Co. Note that Co is only available to the server after authenticating the client for the first time.

The user 1203 accesses his account 1202 with his username and password. The first time he is using a sound pass token, the ID number and new session key are transmitted to the server and stored in the database only after authentication. The session key is encrypted (Ic) with the password prior to transmission to the server.

Fig. 13 is a block diagram 1300 illustrating user authentication using a password as a session key according to yet another embodiment of the invention. In this case, the client 1302 knows the username (U) and the password (PW) to access account 1301. Account 1301 has U and PW stored as parameters. In this case, user 1302 does not have a token available because he has forgotten it or otherwise does not have access to it.

In this case, user 1302 enters U and PW to access the account. The applet 1304 on the client PC creates a session key from the PW Hi= DES(PW,PW). The application 1303 at the server sends a server challenge (Cs) to the client. The applet 1304 on the client PC generates a hash code (Hc), which is a DES encryption of the PW, the previous encryption (Hi) and the server challenge (Cs) adding an xor function. The Hc is the client response (Lc) sent to the server. Although this implementation is less secure because the session key is fixed, the method still ensures a permanent encryption of the password. In a preferred embodiment, this implementation may provide only a limited access to the user account.

Creating and Retrieving a Soft Token

In one embodiment of the present invention the token is not a secure chip but a software file that works with a server driver (dll) and a client applet. The soft token can be made portable and can be duplicated to portable or removable drives. It is important to note herein that the token values are expressed as a modulated sound pass signal and that, in most secure embodiments a new session key is used for each token hash operation. In this way, the token contents never change, but the hash value of those contents sent to the server is never the same.

Fig. 14 is a process flow chart illustrating acts 1400 for creating a soft token for authentication for a user according to embodiments of the present invention. In general use, a soft token is created for the client and the token, which is a sound file or generated sound is used with a session key to produce the hash code that authenticates the user for each transaction that requires authentication.

In act 1401, the server calls a driver or dll at the server or in some connected machine and receives randomly written token contents that provide the basis for future client access of one or of more than on account held for the client by one or more services. It is possible that the token issuer and the authentication entity is a third party to the transaction between a client and a service organization maintaining an account for the client.

In act 1402, the authentication server passes the token contents as clear text string along with a software applet to the client. The applet automatically installs itself either in the clients Web browser as a plug-in or as a separate instance. The applet and the token together may be packaged as a Java-based solution, more particularly an executable Java Archive (JAR) file. The solution includes the domain of the parent application or server-side dll. At act 1403, the server replicates or writes the token contents into a database at the server. Token contents may include, but are not limited to a user ID number, a secrete seed, and an initial session key. Account parameters may include a password or PIN in addition to the other components mentioned above.

When the applet is received at the client, it executes on the client for the purpose of creating the token file at act 1404. In one embodiment there is a virtual keypad included as part of the applet program that may be used by the client to enter an encryption code for the purpose of encrypting the token file. In act 1405, it is determined if the virtual keypad is enabled or not. It may be a matter of user preference. If the virtual keypad is enabled at act 1405, then at act 1406, the user is prompted to enter a code to use as an encryption key. In one embodiment, the user-entered code is message-digest algorithm 5 (MD5) hashed and the hash value of the code is used as the encryption key. In a variation of this embodiment, random salts are added on each end of the token string before encryption. Salts are known in the art and used in DES sometimes to strengthen encryption. MD5 is a well-known hash used for many security applications and for file integrity checking. Other known or future-developed hash algorithms may be used in other embodiments without departing from the spirit and scope of the present invention.

At act 1405, if it is determined that a virtual keypad is not available, then a default code is used and the process skips to act 1407 where the token is encrypted using the MD5 hash value described above or some other value derived from a hash operation.

At act 1407, the token contents are encrypted according to either case of user-entered code or default code, and written to a token JAR file in a preferred embodiment. In the preferred implementation the applet is a Java applet leveraging a token file, which is a JAR file. At act 1408, it is determined if the token deployment mode will be dynamic or not. This option may be pre-set as a default by the token issuer or it may be an election granted to the user. Dynamic deployment mode is an option that prevents any storage of the token at the client machine. In the case of dynamic deployment, the user will immediately use the issue token to perform a secure transaction after which the token is no longer valid. In act 1408 if deployment mode is dynamic then the process ends at act 1409.

If is act 1408 the token deployment mode is not dynamic, then at act 1410 the applet write the token file in encrypted form to the root drive on the client PC. At act 1411 it is determined if the token will be a portable token or not. This option may be a user preference. If at act 1411 the token is not portable, then the process ends at act 1409. If at act 1411 it is determined that the token is a portable token, then at act 1412, the user enters the parameters for the device or devices that will receive the token or a replicate of the token. These parameters may include a device machine address if the device is on a network, or drive letter id the device is directly attached storage (DAS). After the user enters the correct information, the applet writes or replicates the token to the appropriate storage devices at act 1413. The process ends at act 1409.

One with skill in the art of encryption will appreciate that the exact encryption system and methods employed may vary somewhat without departing from the spirit and scope of the present invention. For example, MD4 may replace MD5 as the hash method for the personal or default encryption code. Salts may be used or may not be used. It is reminded here for clarity that the ID number and session key are embedded into the

generated sound or sound file or sound pass that is the token, each time the token is activated, a new session key is generated in a preferred embodiment.

Fig. 15 is a process flow chart illustrating acts 1500 for retrieving or activating a soft token for authentication according to embodiments of the present invention. At act 1501, it is determined whether the token deployment is dynamic mode or not. Dynamic mode means that there is no token resident on the client PC. If at act 1501 dynamic mode is enabled, then at act 1502 the server sends a session key, timestamp and applet to the client. If at act 1501, dynamic mode is not enabled, then the process skips to act 1503 wherein the applet executes of the client PC. In either case, the applet executes on the client PC in act 1503 and saves the session key in act 1504.

At act 1505 it is determined whether the virtual keypad is enabled or not. If at act 1505, the virtual keypad is enabled, then at act 1506 the user is asked to enter a code to use in encryption of the session key saved in act 1504. At act 1508 then the user enters the code. If the virtual keypad is not enabled at act 1505, then a default code is used at act 1507. The code is used to decrypt the token contents. In dynamic mode the applet has the token. If the mode is not dynamic then at act 1509, the applet looks for the client token. The applet will use the first token it finds if there are multiple portable tokens or if the token is otherwise resident in more than one location accessible to the applet at the time.

At act 1510, the applet retrieves the domain of the token issuer to ensure it is the correct token. At act 1511, the PC applet creates an MD5 hash of the user-entered code of act 1508, or of the default code of act 1507. If operating in dynamic mode, the applet also updates the exiting token contents with the passed contents. At act 1512, the PC applet uses the hash to decrypt the token contents including removing any salts from the token contents. At act 1513, the PC applet concatenates the token value domain name and timestamp received from the server if dynamic mode is enabled. At act 1514, the applet performs an MD5 hash on the string of act 1513. At act 1515 the PC applet sends the hashed contents or content string to the authentication server.

At act 1516, the server calls the software driver (dll) to validate the contents of the string received from the client against the token and its domain retrieved from the server database. At act 1517 the dll attempt to authenticate the user by comparing the Parsed contents, which have been MD5 hashed by the client applet to a server hash of the token value, domain, and timestamp from the server. In act 1517, the server also checks to current time stamp against the current time. If it is operating according to dynamic mode. If the time stamp is not more than 2 minutes or so before the current time at the server, and the hashed values match then the user is authenticated in act 1517 and is granted access into the secure area at act 1518. The content string should equal the MD5 hash value of the server database token, the server domain and the original timestamp. Act 1518 may be access to a resource or it may be an approval or other type of user validation for a transaction.

If the hashed values matched but the time stamp window has expired in act 1517 then authentication fails and at act 1519 the server denies access or approval and returns an error to the user. Likewise, if the hashed values do not match identically then the user is not authenticated and the process moves again to act 1519.

It will be apparent to a skilled person that the examples and embodiments described in enabling detail above are not completely limiting to the invention. They are examples of practice of the invention. There may be many alterations that may be made in the described embodiments without departing from the spirit and scope of the invention. For example, readers and tokens may be implemented in many ways, in many shapes, and with a variety of materials, still within the scope of this invention. Further communications protocols may vary, and there are many ways of providing functionality critical to the invention with software beyond the examples given. It is not, for example, strictly limiting that the token generated is a sound file. Tokens may be provided in other ways as well. In one case one might provide a modulated light signal, or infrared signal to be read by an optical reader, the signal modulated to provide the same sort of information provided by the audio token described in detail above. The token might be a modulated vibratory signal. It could also be a character string coded in a fashion to

provide the necessary input. Therefore the invention is limited only by the scope of the following claims.

5

What is claimed is:

1. An apparatus comprising:

a transaction card bearing data and having an output interface capable of transmitting the data;

a card reader having an input interface enabled to accept the data from the output interface of the transaction card;

conversion circuitry converting the card data to an analog modulated signal; and

an output pin from the card reader adapted to engage in a microphone port of a computerized appliance, the output pin providing the analog modulated signal to the port, and thence to the computerized appliance.

2. The apparatus of claim 1 wherein the computerized appliance is enabled to communicate on a network, and has sound conversion circuitry converting the analog modulated signal to digital data.

3. The apparatus of claim 2 wherein the computerized appliance comprise a processor executing coded instructions from a non-transitory medium, and the coded instruction executed by the processor cause the data to be used in a communication on the network.

4. The apparatus of claim 1 wherein the transaction card comprises an electronic chip having a digital memory, and the card value is stored as a sequence of bits in the digital memory.

5. The apparatus of claim 4 wherein the analog modulated signal is derived from the card value stored in the digital memory.

6. The apparatus of claim 5 wherein the conversion circuitry is a part of the circuitry of the electronic chip.

7. The apparatus of claim 3 wherein the coded instructions provide two-way communication with a server hosted by a financial institution or an on-line merchant, and the two-communication facilitate transactions by an owner of the card with the financial institution or purchases by the owner of the card with an on-line merchant.

8. The apparatus of claim 7 wherein the coded instructions operate to accept a card verification code (CVV) in the card data, to use the CVV in the purchases or transactions, and for each transaction or purchase accomplished, a new CVV is created and stored in the card data.

9. A method comprising:

coupling a transaction card bearing data and having an output interface capable to transmit the data to a card reader having an input interface enabled to accept the data from the output interface of the transaction card;

converting the card data to an analog modulated signal by conversion circuitry; and

providing the analog modulated signal by an output pin from the card reader engaged in a microphone port of a computerized appliance, to the computerized appliance.

10. The method of claim 9 wherein the computerized appliance communicates on a network, and has sound conversion circuitry converting the analog modulated signal to digital data.

11. The method of claim 10 wherein the computerized appliance executes coded instructions on a processor from a non-transitory medium, and the coded instruction executed by the processor cause the data to be used in a communication on the network.

12. The method of claim 9 wherein the transaction card comprises an electronic chip having a digital memory, and the card value is stored as a sequence of bits in the digital memory.

13. The method of claim 12 wherein the analog modulated signal is derived from the card value stored in the digital memory.

14. The method of claim 13 wherein the conversion circuitry is a part of the circuitry of the electronic chip.

15. The method of claim 11 wherein the coded instructions provide two-way communication with a server hosted by a financial institution or an on-line merchant, and the two-communication facilitate transactions by an owner of the card with the financial institution or purchases by the owner of the card with an on-line merchant.

16. The method of claim 15 wherein the coded instructions operate to accept a card verification code (CVV) in the card data, to use the CVV in the purchases or transactions, and for each transaction or purchase accomplished, a new CVV is created and stored in the card data.

ABSTRACT OF THE DISCLOSURE

An apparatus includes a transaction card bearing data and having an output interface capable of transmitting the data, a card reader having an input interface enabled to accept the data from the output interface of the transaction card, conversion circuitry converting the card data to an analog modulated signal, and an output pin from the card reader adapted to engage in a microphone port of a computerized appliance, the output pin providing the analog modulated signal to the port, and thence to the computerized appliance.

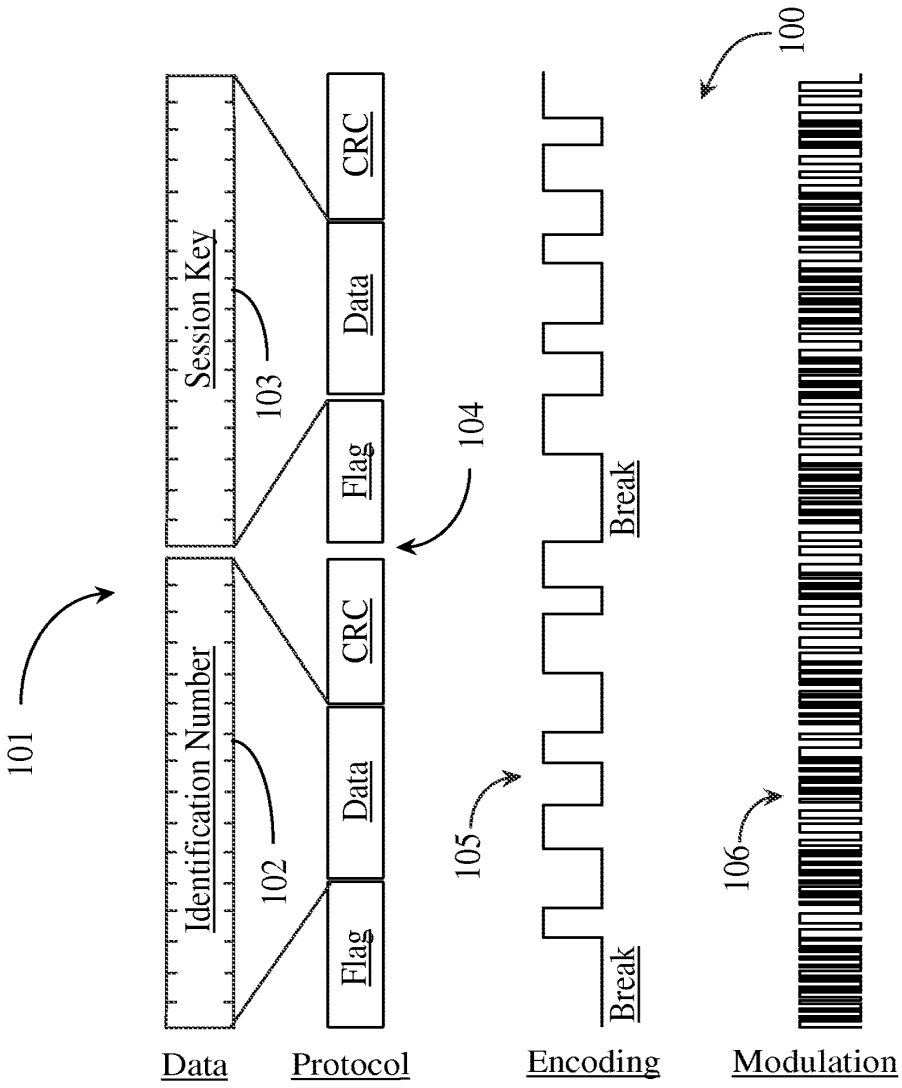

100
101
Identification Number
Session Key
102
103
104
Flag
Data
CRC
Flag
Data
CRC
105
Break
Break
106
Data
Protocol
Encoding
Modulation

Fig. 1

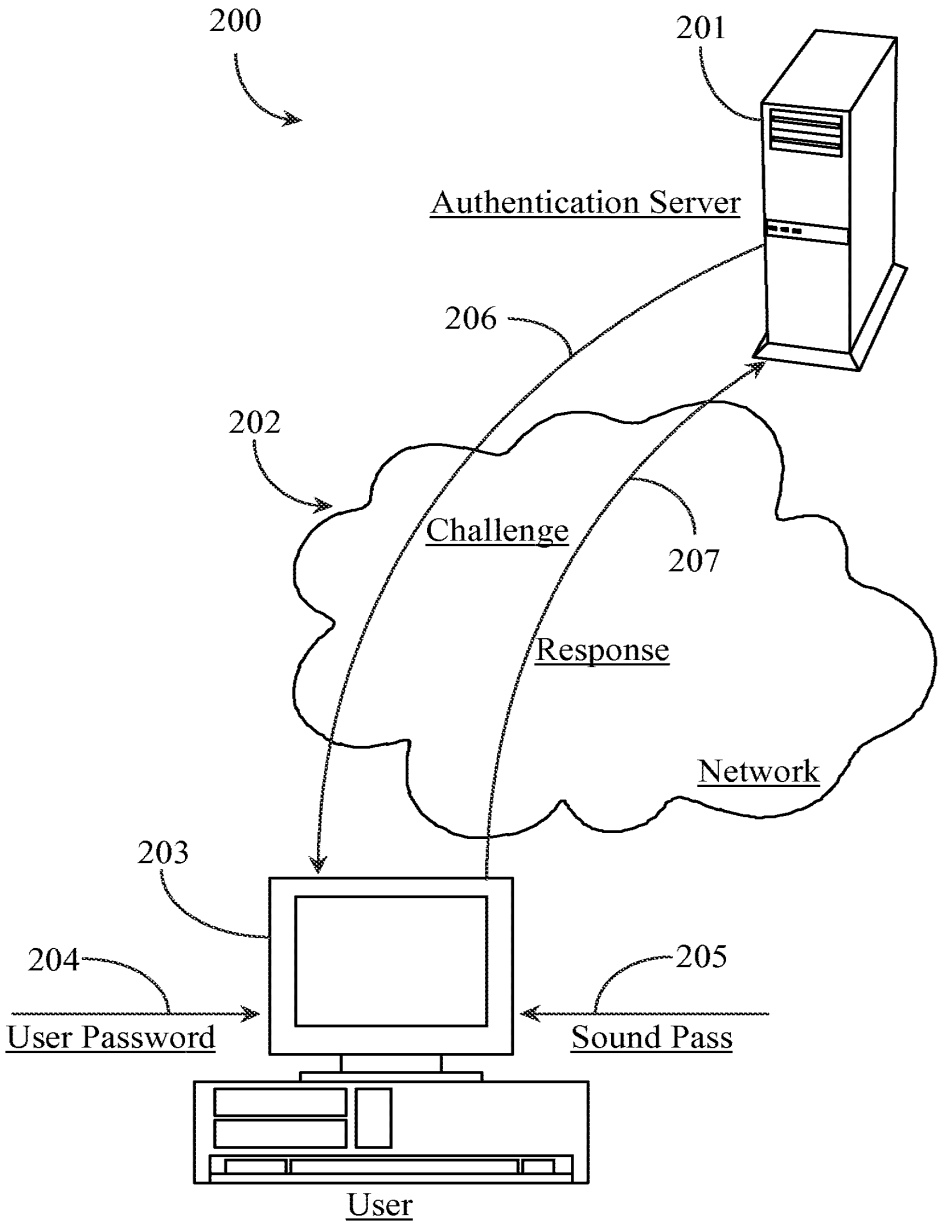

200
201
Authentication Server
206
202
Challenge
207
Response
Network
203
204
205
User Password
Sound Pass
User

Fig. 2

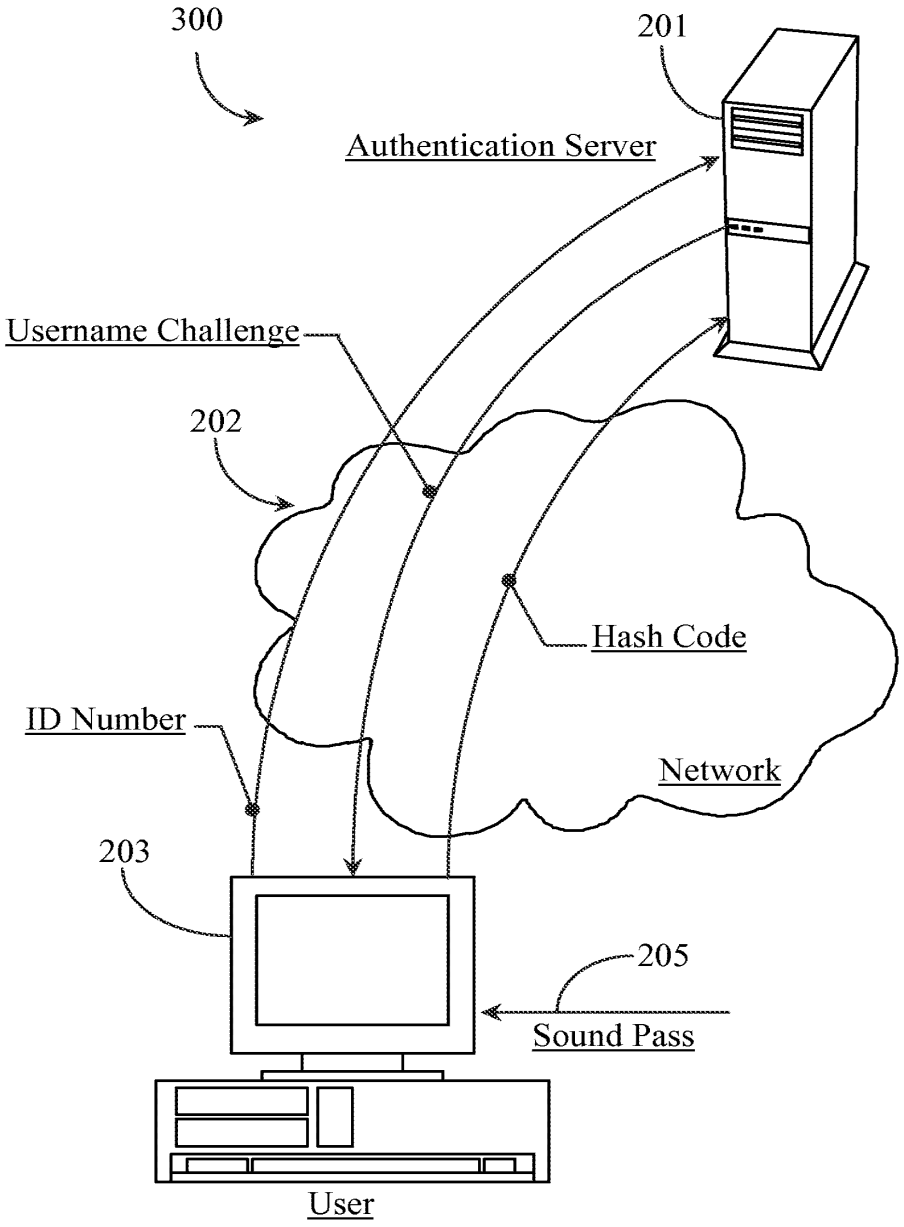

300
201
Authentication Server
Username Challenge
202
Hash Code
ID Number
Network
203
205
Sound Pass
User

Fig. 3

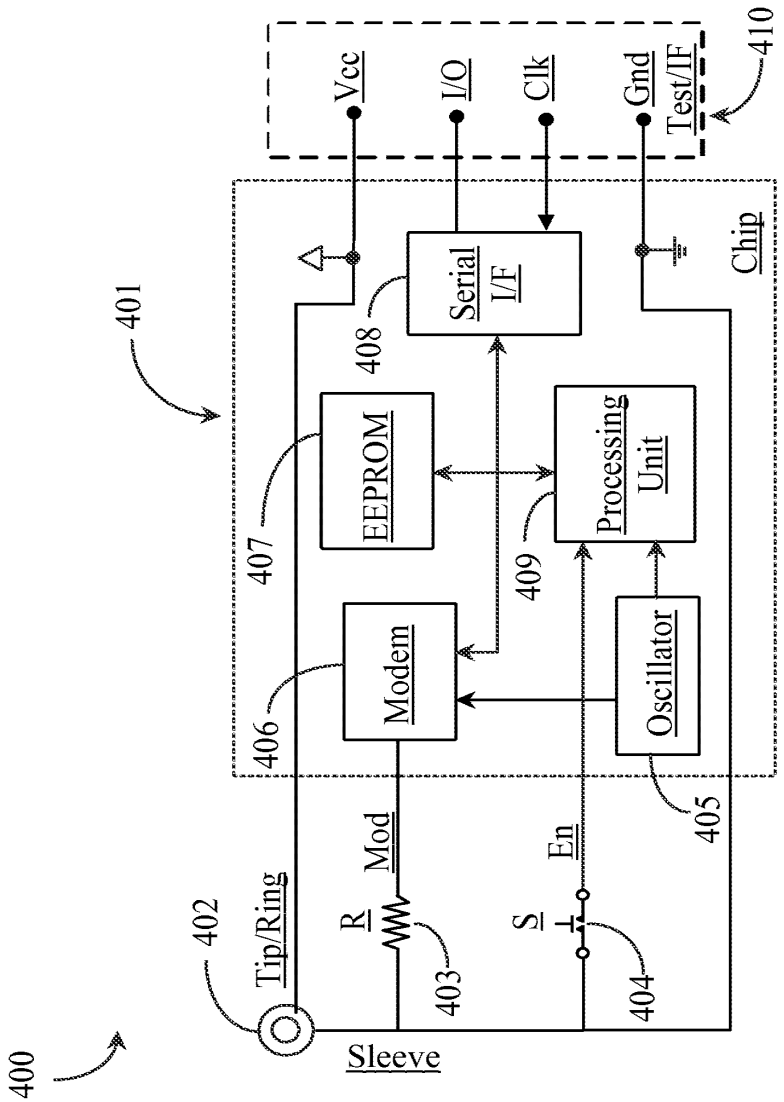

400
401
402
Tip/Ring
Sleeve
403
R
Mod
404
S
En
405
Oscillator
406
Modem
407
EEPROM
408
Serial
I/F
409
Processing
Unit
410
Vcc
I/O
Clk
Gnd
Test/IF
Chip

Fig. 4

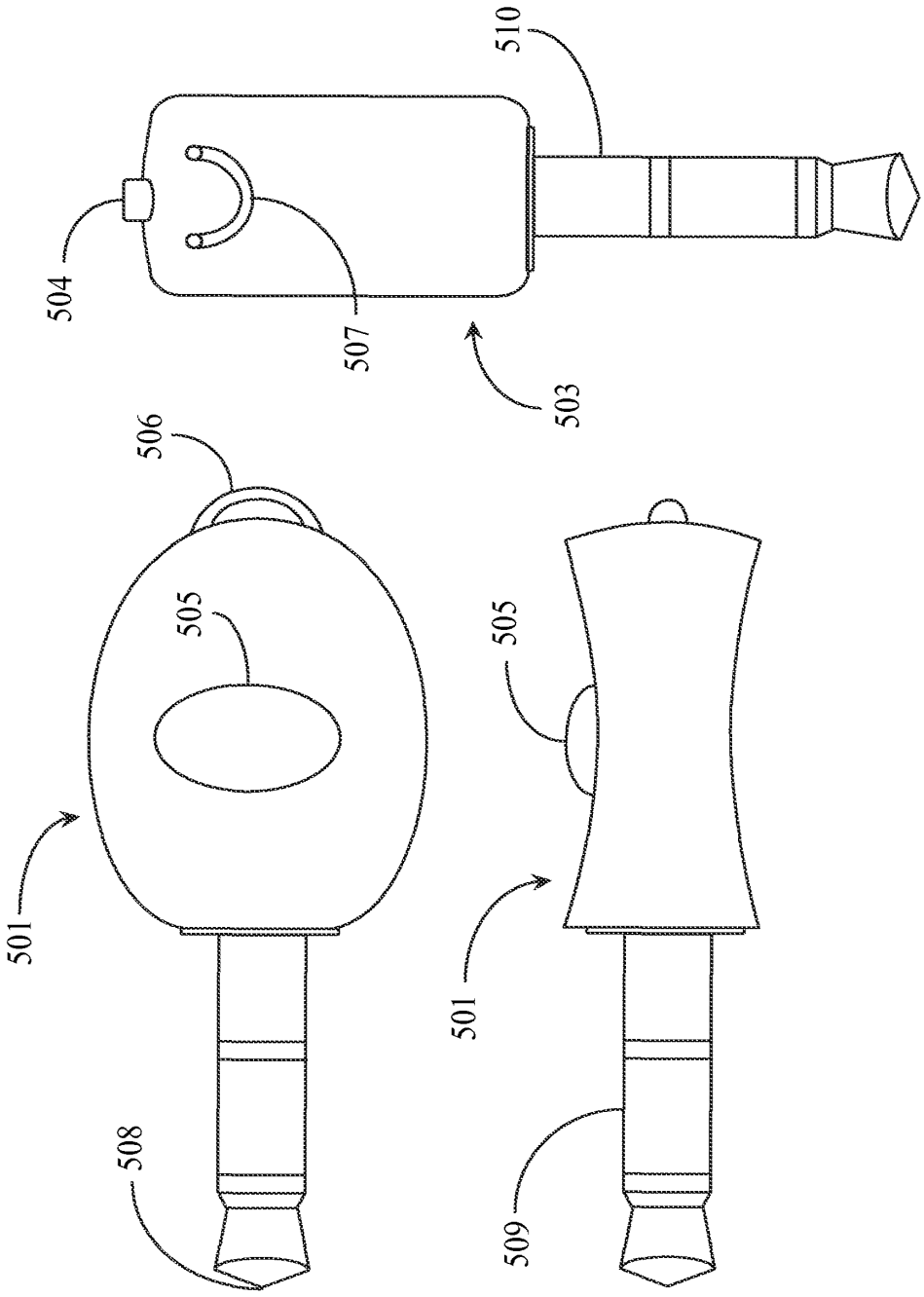


Fig. 5

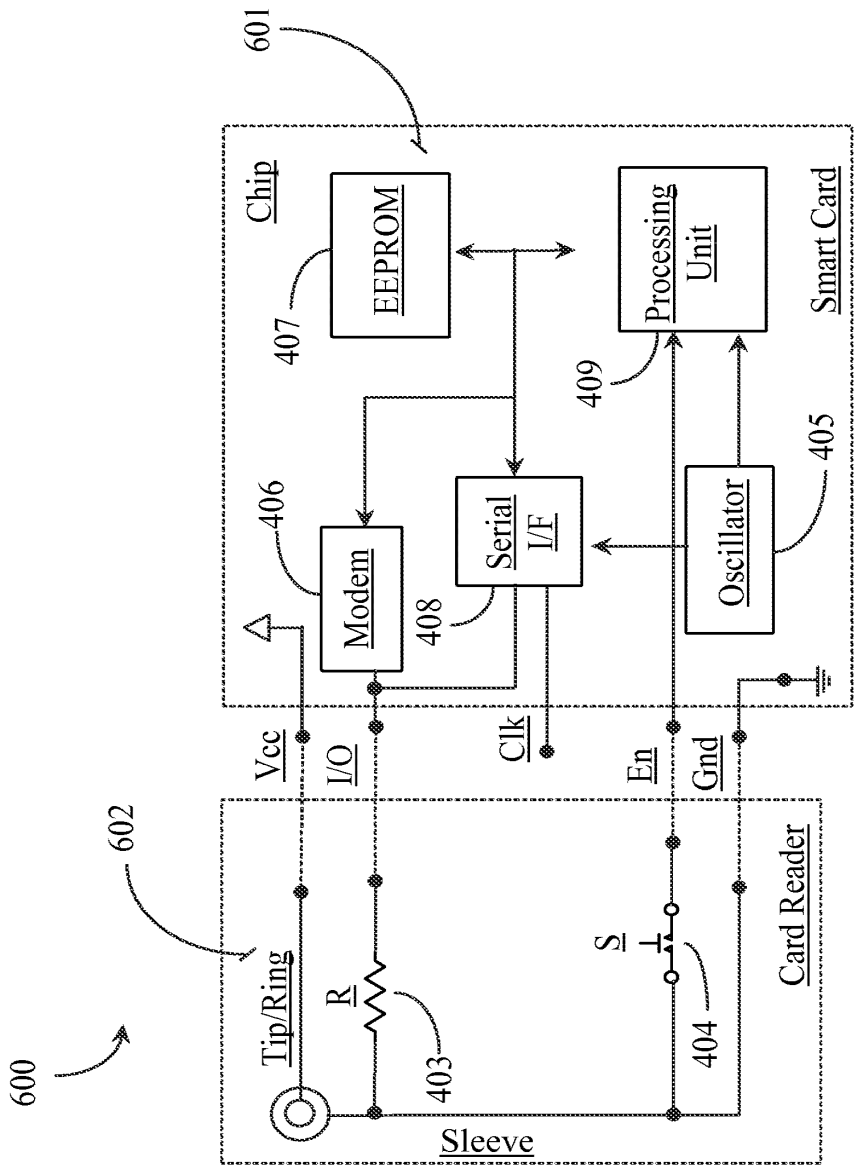

600
602
601
Chip
Smart Card
EEPROM
407
Processing Unit
409
Modem
406
Serial I/F
408
Oscillator
405
Vcc
I/O
Clk
En
Gnd
Tip/Ring
R
403
S
404
Card Reader
Sleeve

Fig.6

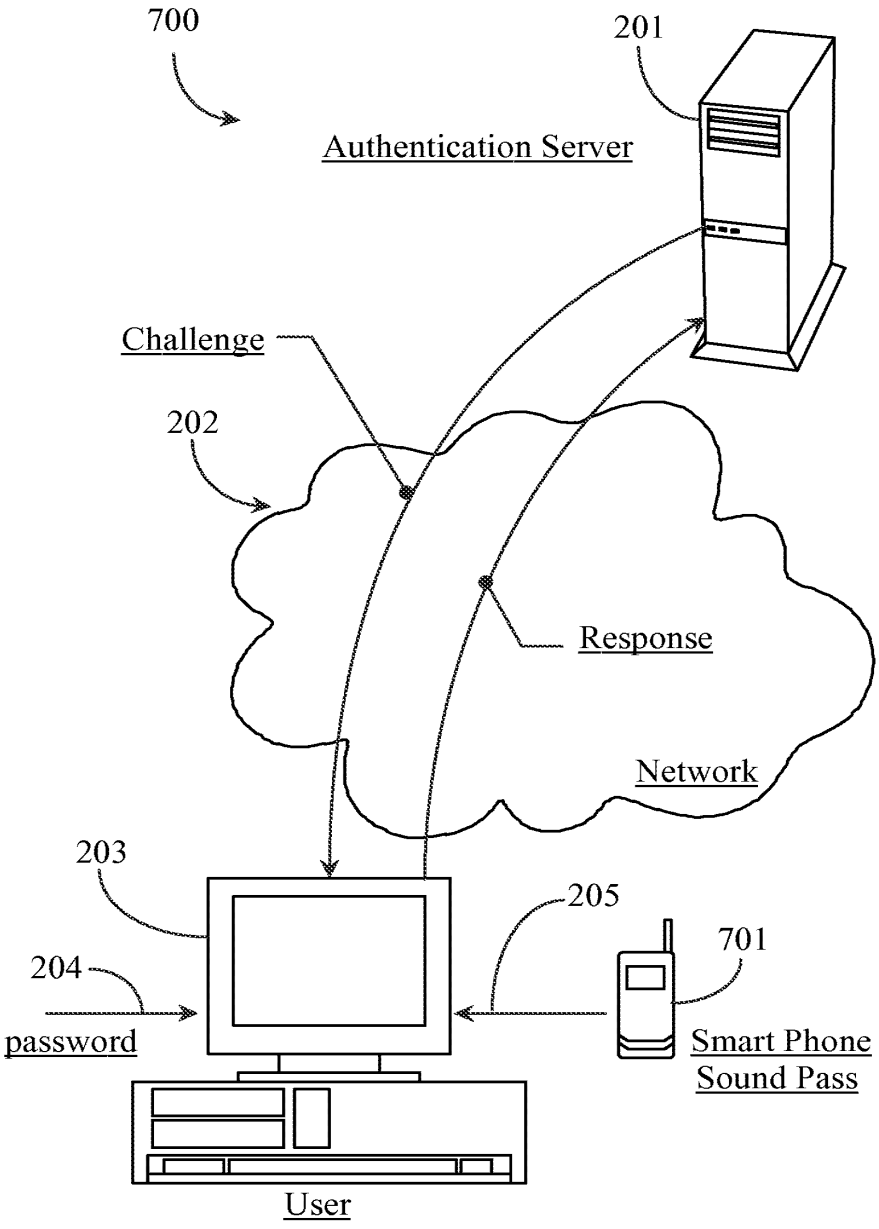

700
201
Authentication Server
Challenge
202
Response
Network
203
205
701
204
password
Smart Phone
Sound Pass
User

Fig. 7

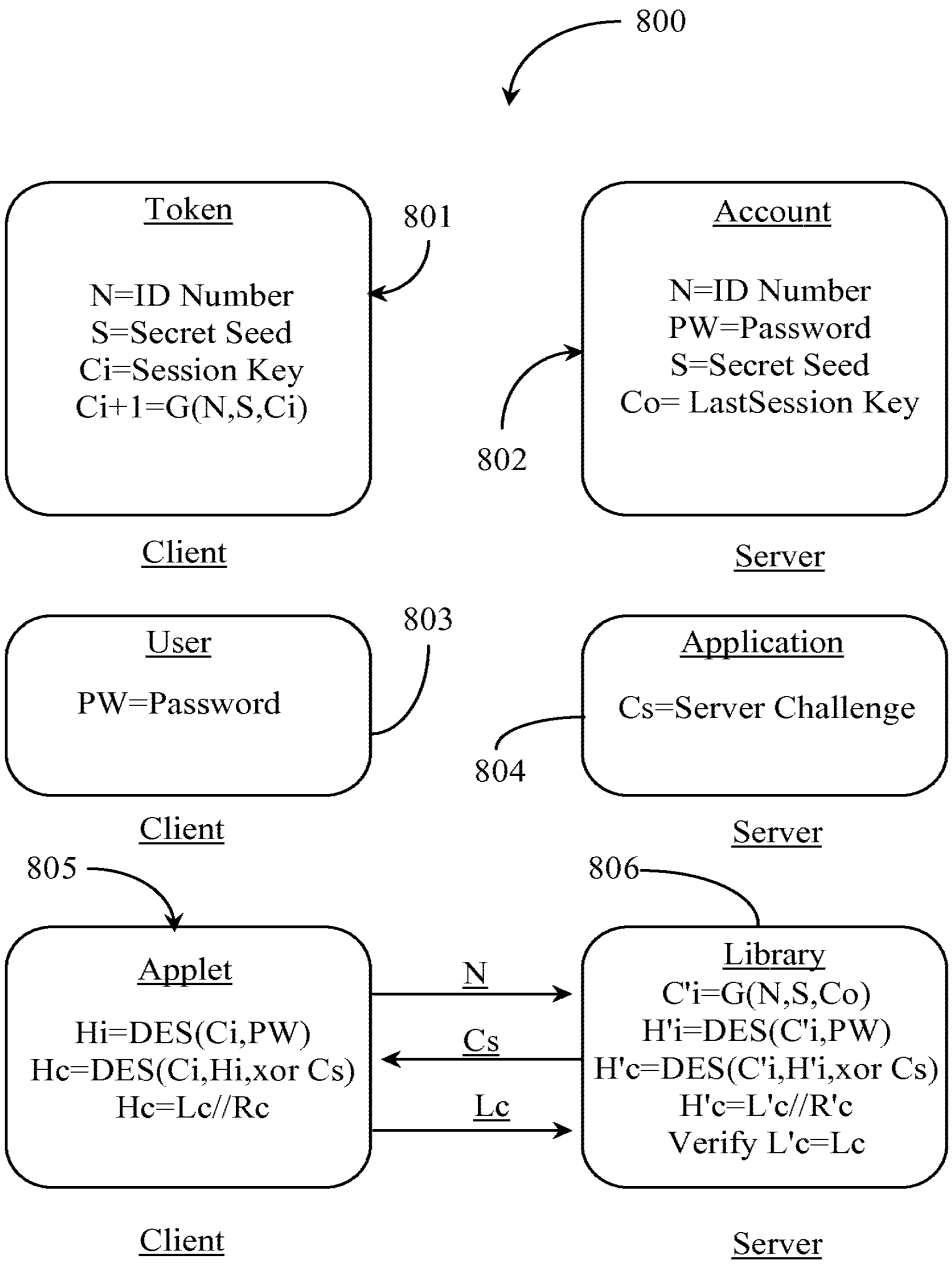

800
Token
N=ID Number
S=Secret Seed
Ci=Session Key
Ci+1=G(N,S,Ci)
801
802
Account
N=ID Number
PW=Password
S=Secret Seed
Co= LastSession Key
Client
Server
User
PW=Password
803
804
Application
Cs=Server Challenge
Client
Server
805
806
Applet
Hi=DES(Ci,PW)
Hc=DES(Ci,Hi,xor Cs)
Hc=Lc//Rc
N
Cs
Lc
Library
C'i=G(N,S,Co)
H'i=DES(C'i,PW)
H'c=DES(C'i,H'i,xor Cs)
H'c=L'c//R'c
Verify L'c=Lc
Client
Server

Fig. 8

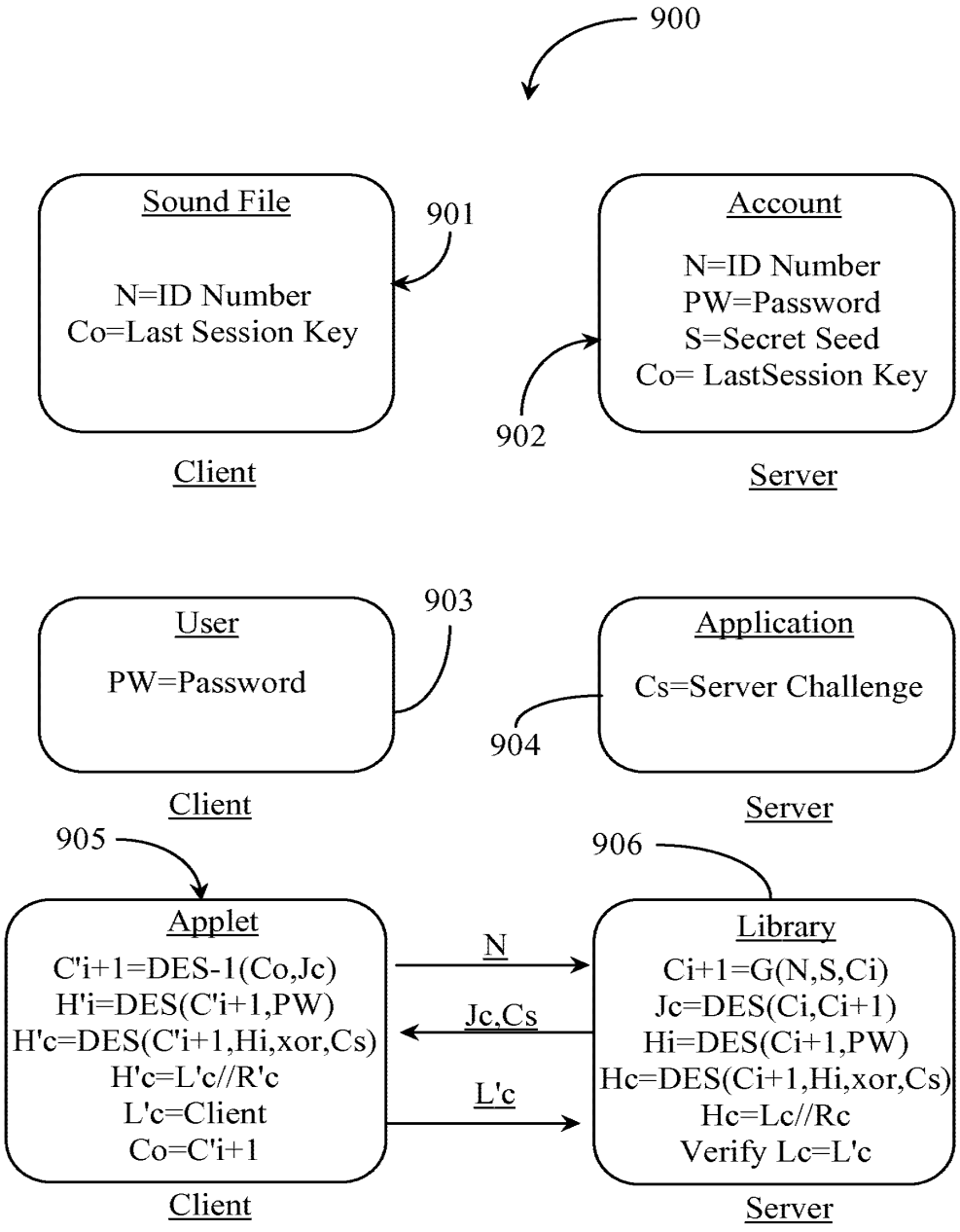

900
Sound File
N=ID Number
Co=Last Session Key
901
Client
Account
N=ID Number
PW=Password
S=Secret Seed
Co= LastSession Key
902
Server
User
PW=Password
903
Client
Application
Cs=Server Challenge
904
Server
905
Applet
C'i+1=DES-1(Co,Jc)
H'i=DES(C'i+1,PW)
H'c=DES(C'i+1,Hi,xor,Cs)
H'c=L'c//R'c
L'c=Client
Co=C'i+1
Client
906
Library
Ci+1=G(N,S,Ci)
Jc=DES(Ci,Ci+1)
Hi=DES(Ci+1,PW)
Hc=DES(Ci+1,Hi,xor,Cs)
Hc=Lc//Rc
Verify Lc=L'c
Server
N
Jc,Cs
L'c

Fig. 9

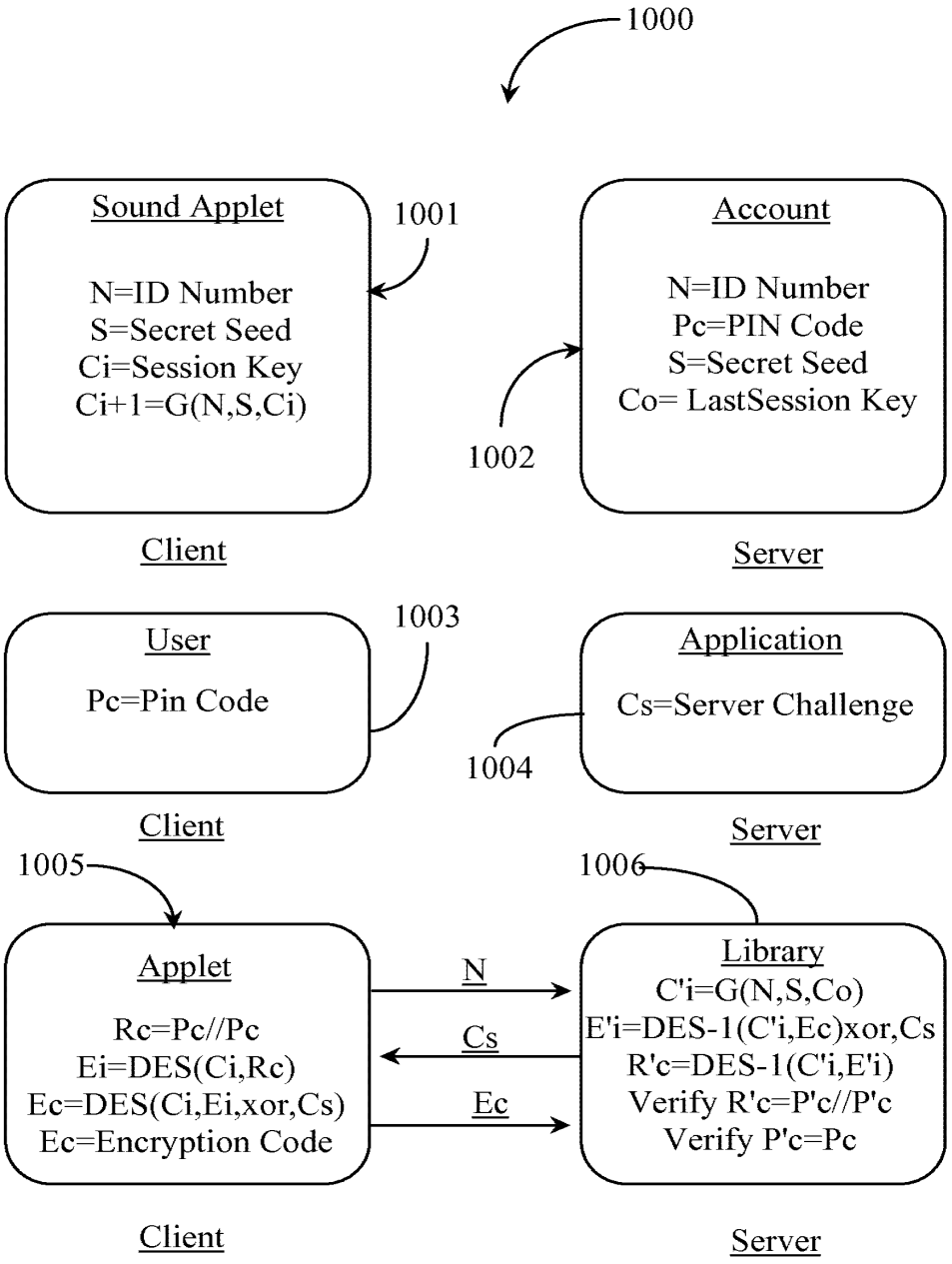

1000
Sound Applet
N=ID Number
S=Secret Seed
Ci=Session Key
Ci+1=G(N,S,Ci)
1001
1002
Account
N=ID Number
Pc=PIN Code
S=Secret Seed
Co= LastSession Key
Client
Server
User
Pc=Pin Code
1003
1004
Application
Cs=Server Challenge
Client
Server
1005
1006
Applet
Rc=Pc//Pc
Ei=DES(Ci,Rc)
Ec=DES(Ci,Ei,xor,Cs)
Ec=Encryption Code
N
Cs
Ec
Library
C'i=G(N,S,Co)
E'i=DES-1(C'i,Ec)xor,Cs
R'c=DES-1(C'i,E'i)
Verify R'c=P'c//P'c
Verify P'c=Pc
Client
Server

Fig. 10

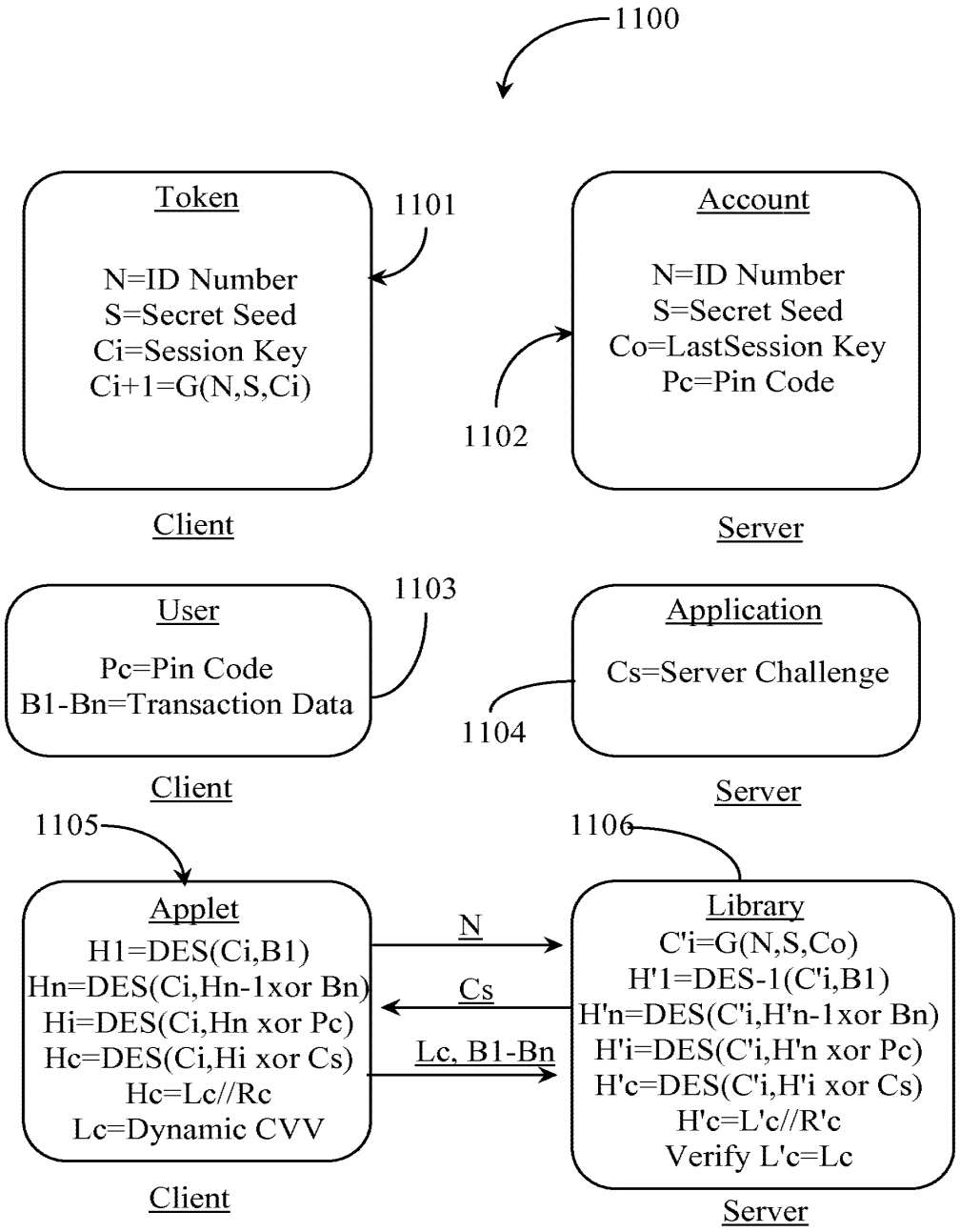

1100
Token
N=ID Number
S=Secret Seed
Ci=Session Key
Ci+1=G(N,S,Ci)
1101
Client
Account
N=ID Number
S=Secret Seed
Co=LastSession Key
Pc=Pin Code
1102
Server
User
Pc=Pin Code
B1-Bn=Transaction Data
1103
Client
Application
Cs=Server Challenge
1104
Server
1105
Applet
H1=DES(Ci,B1)
Hn=DES(Ci,Hn-1xor Bn)
Hi=DES(Ci,Hn xor Pc)
Hc=DES(Ci,Hi xor Cs)
Hc=Lc//Rc
Lc=Dynamic CVV
Client
N
Cs
Lc, B1-Bn
1106
Library
C'i=G(N,S,Co)
H'1=DES-1(C'i,B1)
H'n=DES(C'i,H'n-1xor Bn)
H'i=DES(C'i,H'n xor Pc)
H'c=DES(C'i,H'i xor Cs)
H'c=L'c//R'c
Verify L'c=Lc
Server

Fig. 11

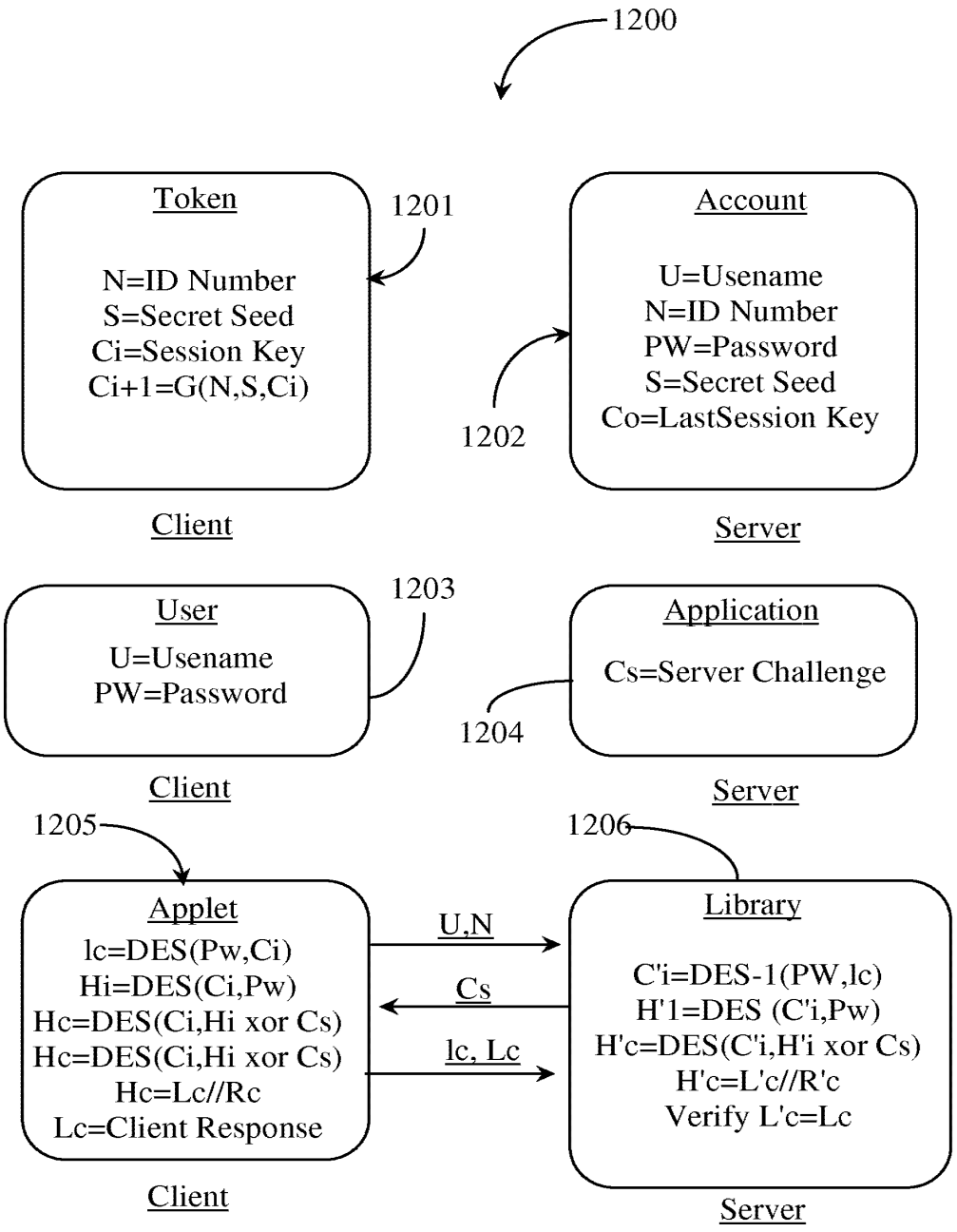

1200
Token
N=ID Number
S=Secret Seed
Ci=Session Key
Ci+1=G(N,S,Ci)
1201
Client
Account
U=Usename
N=ID Number
PW=Password
S=Secret Seed
Co=LastSession Key
1202
Server
User
U=Usename
PW=Password
1203
Client
Application
Cs=Server Challenge
1204
Server
1205
Applet
lc=DES(Pw,Ci)
Hi=DES(Ci,Pw)
Hc=DES(Ci,Hi xor Cs)
Hc=DES(Ci,Hi xor Cs)
Hc=Lc//Rc
Lc=Client Response
Client
U,N
Cs
lc, Lc
1206
Library
C'i=DES-1(PW,lc)
H'1=DES (C'i,Pw)
H'c=DES(C'i,H'i xor Cs)
H'c=L'c//R'c
Verify L'c=Lc
Server

Fig. 12

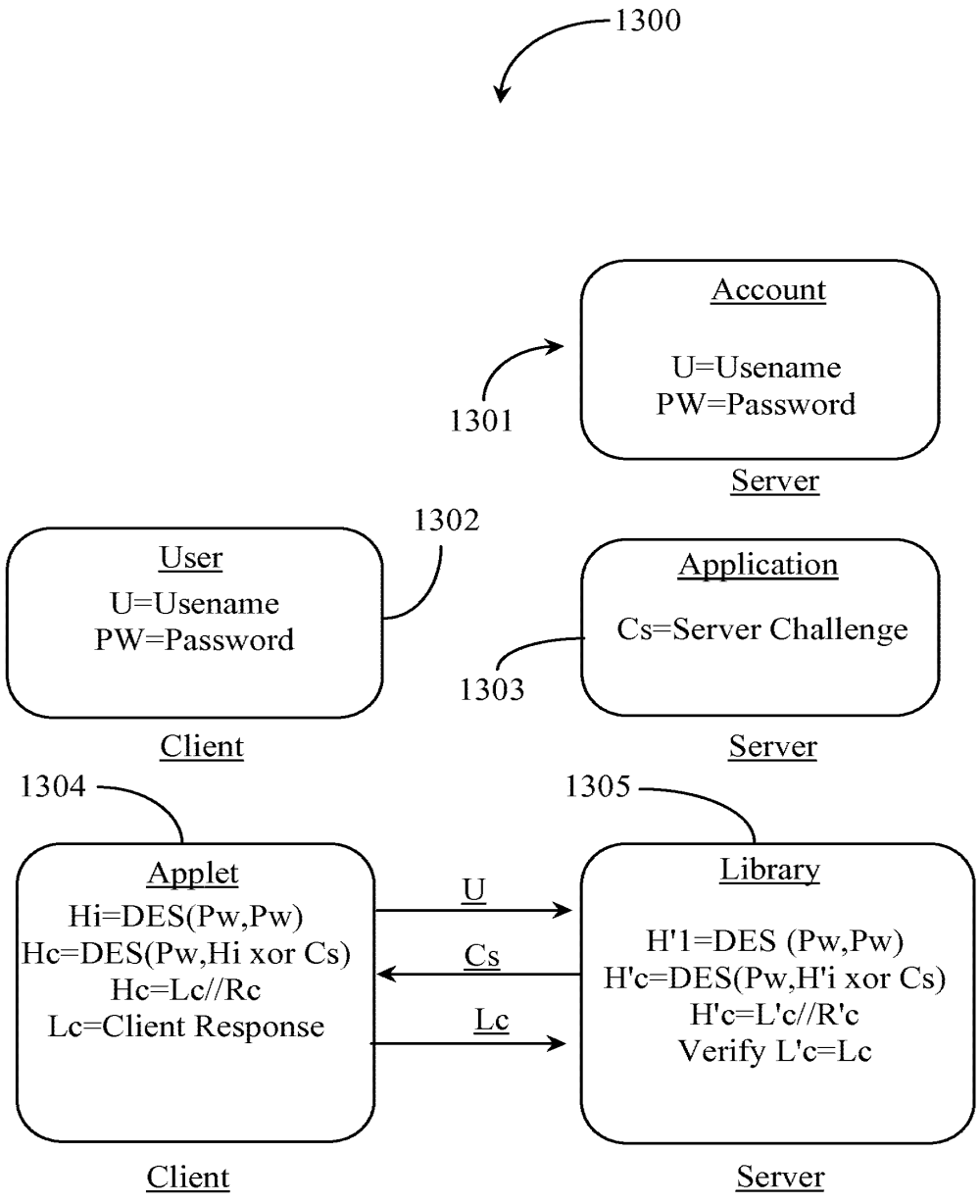

1300
Account
U=Usename
PW=Password
1301
Server
1302
User
U=Usename
PW=Password
Application
Cs=Server Challenge
1303
Client
Server
1304
1305
Applet
Hi=DES(Pw,Pw)
Hc=DES(Pw,Hi xor Cs)
Hc=Lc//Rc
Lc=Client Response
U
Cs
Lc
Library
H'1=DES (Pw,Pw)
H'c=DES(Pw,H'i xor Cs)
H'c=L'c//R'c
Verify L'c=Lc
Client
Server

Fig. 13

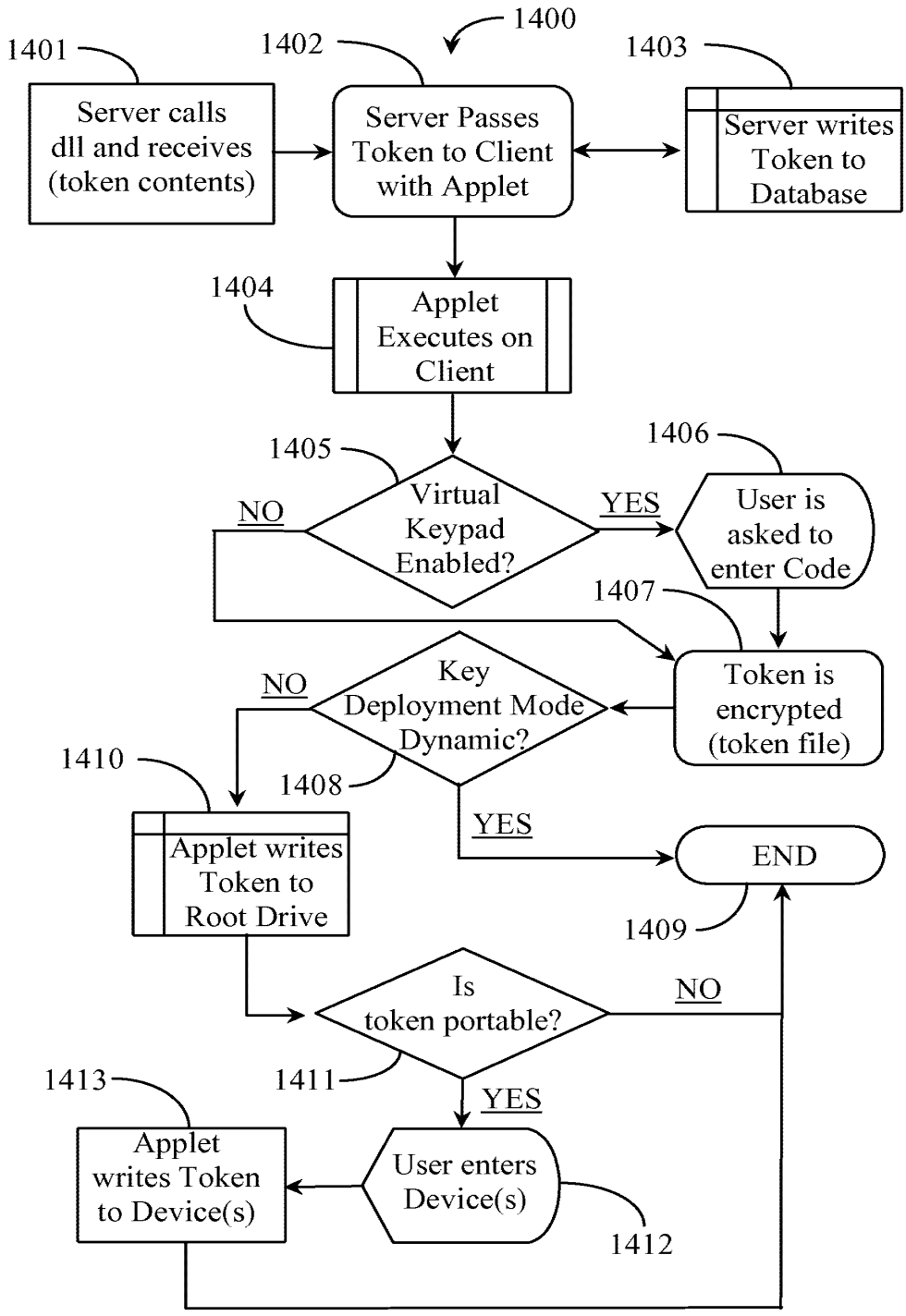

1400
1401
1402
1403
Server calls dll and receives (token contents)
Server Passes Token to Client with Applet
Server writes Token to Database
1404
Applet Executes on Client
1405
1406
Virtual Keypad Enabled?
NO
YES
User is asked to enter Code
1407
Token is encrypted (token file)
Key Deployment Mode Dynamic?
NO
1410
1408
YES
END
Applet writes Token to Root Drive
1409
Is token portable?
NO
1413
1411
YES
Applet writes Token to Device(s)
User enters Device(s)
1412

Fig. 14

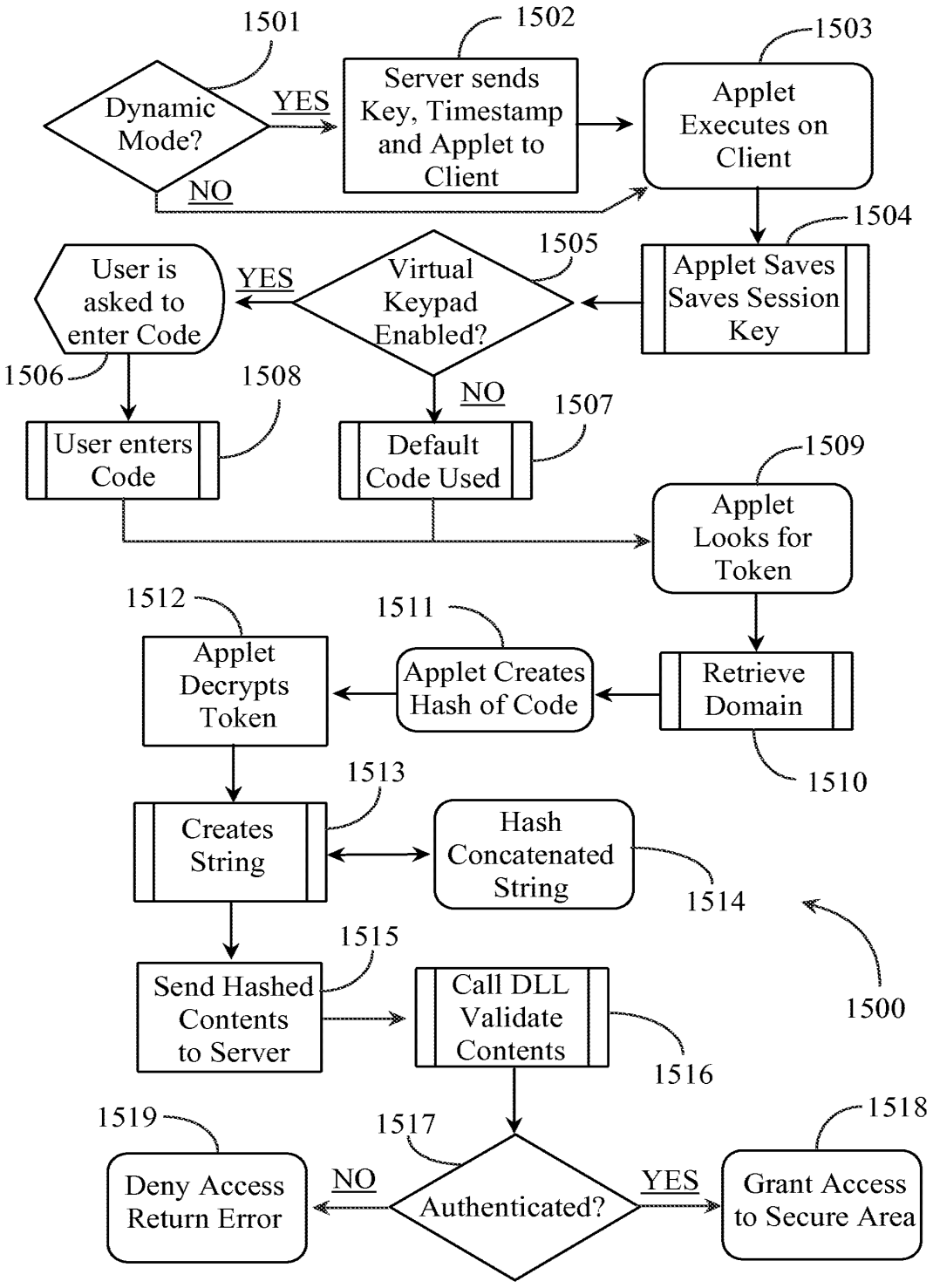

1501
Dynamic Mode?
YES
NO
1502
Server sends Key, Timestamp and Applet to Client
1503
Applet Executes on Client
1504
Applet Saves Saves Session Key
1505
Virtual Keypad Enabled?
YES
User is asked to enter Code
1506
NO
1507
Default Code Used
1508
User enters Code
1509
Applet Looks for Token
1510
Retrieve Domain
1511
Applet Creates Hash of Code
1512
Applet Decrypts Token
1513
Creates String
1514
Hash Concatenated String
1515
Send Hashed Contents to Server
1516
Call DLL Validate Contents
1517
Authenticated?
NO
1519
Deny Access Return Error
YES
1518
Grant Access to Secure Area
1500

Fig. 15

Doc Code: PA..

Document Description: Power of Attorney

PTO/AIA/82A (07-12)

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Application Number	
Filing Date	
First Named Inventor	Vincent Cedric Colnot
Title	Methods and Apparatus for Enabling Secure Network-Based Transactions
Art Unit	
Examiner Name	
Attorney Docket Number	P1987.01

SIGNATURE of Applicant or Patent Practitioner

Signature	/Donald R. Boys/	Date	10/27/2014
Name	Donald R. Boys	Telephone	831-768-1755
Registration Number	35,074		

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

☐ *Total of _____ forms are submitted.

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24739

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Address					
City		State		Zip	
Country					
Telephone		Email			

I am the Applicant:

☐ Inventor or Joint Inventor

☐ Legal Representative of a Deceased or Legally Incapacitated Inventor

☒ Assignee or Person to Whom the Inventor is Under an Obligation to Assign

☐ 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)

SIGNATURE of Applicant for Patent

Signature	Mike Angelinovich	Date	10/27/14
Name	Mike Angelinovich	Telephone	
Title and Company	CEO OHVA, Inc.		

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. Submit multiple forms for more than one signature, see below *.

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A105

Electronic Patent Application Fee Transmittal

Application Number:	
Filing Date:	
Title of Invention:	Methods and Apparatus for Enabling Secure Network-Based Transactions
First Named Inventor/Applicant Name:	Vincent Cedric Colnot
Filer:	Donald Rex Boys/Sheri Beasley
Attorney Docket Number:	P1987.02

Filed as Small Entity

Filing Fees for Track I Prioritized Examination - Nonprovisional Application under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Utility filing Fee (Electronic filing)	4011	1	70	70
Utility Search Fee	2111	1	300	300
Utility Examination Fee	2311	1	360	360
Request for Prioritized Examination	2817	1	2000	2000
Pages:				
Claims:				
Miscellaneous-Filing:				
PROCESSING FEE, EXCEPT PROV. APPLS.	2830	1	70	70

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				
Miscellaneous:				
		Total in USD ($)		**2800**

Electronic Acknowledgement Receipt	
EFS ID:	21655253
Application Number:	14636674
International Application Number:	
Confirmation Number:	3697
Title of Invention:	Methods and Apparatus for Enabling Secure Network-Based Transactions
First Named Inventor/Applicant Name:	Vincent Cedric Colnot
Customer Number:	24739
Filer:	Donald Rex Boys/Sheri Beasley
Filer Authorized By:	Donald Rex Boys
Attorney Docket Number:	P1987.02
Receipt Date:	03-MAR-2015
Filing Date:	
Time Stamp:	15:18:26
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	$2800
RAM confirmation Number	1955
Deposit Account	500534
Authorized User	
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	TrackOne Request	aia0424-track_one.pdf	152658 02e8579cdef2f6905ab4bda2c2ee4929f2c65cff	no	2
Warnings:					
Information:					
2	Application Data Sheet	aia0014ADS.pdf	1265650 0ab3b352a0165a910875c63baae7167e98dc5999	no	7
Warnings:					
Information:					
3	Oath or Declaration filed	DECLARATIONS.pdf	1639967 be164623a5c528f59e231394ff73f0953e46449b5	no	4
Warnings:					
Information:					
4		1987_02PA.pdf	112931 ed574dc27d78fdcf9e9e6b39bec7107a749db1e5	yes	30

Multipart Description/PDF files in .zip description

Document Description	Start	End
Specification	1	26
Claims	27	29
Abstract	30	30

Warnings:					
Information:					
5	Drawings-only black and white line drawings	Drawings.pdf	1554461 9d849e86724db95b4de3ca7a408888695f7e6177	no	15
Warnings:					
Information:					
6	Power of Attorney	POA1987_02.pdf	930142 525bf43ada2837c49f0a0cdd7625ba819b0bc01c	no	2

Warnings:					
Information:					
7	Fee Worksheet (SB06)	fee-info.pdf	39071 af6edbda1568d0387a89df2235fff1984cf0f248	no	2
Warnings:					
Information:					
			Total Files Size (in bytes):	5694880	

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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 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.