# 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.	
15/701,100	09/11/2017	Curtis C. Villars	05019/003322-US1	9395	
125657 Joint Customer	7590 12/11/201 Number	9	EXAMINER		
Leason Ellis LI	LP/MasterCard Worldw	ANDREI, RADU			
One Barker Avenue, Fifth Floor White Plains, NY 10601			ART UNIT	PAPER NUMBER	
			3682		
			NOTIFICATION DATE	DELIVERY MODE	
			12/11/2019	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):

uspto@leasonellis.com

	Application No.	Applicant(s)				
	15/701,100	Villars et al.				
Office Action Summary	Examiner	Art Unit	AIA (FITF) Status			
	RADU ANDREI	3682	Yes			
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondend	ce address			
A SHORTENED STATUTORY PERIOD FOR REPL'DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1 date of this communication.  - If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tim will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	nely filed after SIX ( the mailing date of ED (35 U.S.C. § 133	(6) MONTHS from the mailing f this communication.			
Status						
1) Responsive to communication(s) filed on 11/25/2019.						
☐ A declaration(s)/affidavit(s) under <b>37 CFR 1.130(b)</b> was/were filed on						
2a) ☑ This action is <b>FINAL</b> . 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) 1-5,7-11 and 13-20 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) <u>1-5,7-11 and 13-20</u> 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 <u>allowable</u> , you may be eligible to benefit from the <b>Patent Prosecution Highway</b> 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	• •					
	un myony to	·A*··				
Application Papers 10)  The specification is objected to by the Exami	iner.					
11) The drawing(s) filed on is/are: a) a		the Examina	er.			
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						
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 t	the:					
<ol> <li>Certified copies of the priority docur</li> </ol>	ments have been received.					
2. Certified copies of the priority docur	ments have been re <mark>ceived in A</mark> ç	plication No.				
<ol> <li>Copies of the certified copies of the application from the International But</li> </ol>		received in th	nis National Stage			
** See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) V Notice of References Cited (PTO-892)  3) Interview Summary (PTO-413)						
_	Paner No(s)/Mail D					
<ol> <li>Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/S Paper No(s)/Mail Date</li> </ol>	4) Other:					

Art Unit: 3682

#### **DETAILED ACTION**

Page 2

The present application, filed on 9/11/2017 is being examined under the AIA first inventor to file provisions.

The following is a final Office Action in response to Applicant's amendments filed on 11/25/2019.

- a. Claims 1-5, 7-11, 13, 17 are amended
- b. Claims 6, 12 are cancelled

Overall, Claims 1-5, 7-11, 13-20 are pending and have been considered below.

# Claim Rejections - 35 USC § 101

#### 35 USC 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.

Claims 1-5, 7-11, 13-20 are rejected under 35 USC 101 because the claimed invention is not directed to patent eligible subject matter. The claimed matter is directed to a judicial exception (i.e. an abstract idea not integrated into a practical application) without significantly more.

Per Step 1 and Step 2A of the two-step eligibility analysis, independent Claim 1, Claim 7, claim 13 and Claim 17 and the therefrom dependent claims are directed respectively to a computer implemented method, to a system, to a system and to a method. Thus, on its face, each such independent claim and the therefrom dependent claims are directed to a statutory category of invention.

However, Claim 1, (which is repeated in Claims 7, 13, 17) is rejected under 35 U.S.C. 101 because the claim is directed to an abstract idea, a judicial exception, without reciting additional elements that integrate the judicial exception into a practical application. The claim

recites receiving promotion acceptances, modifying the a promotion or the targeting of a promotion or a campaign associated with the promotion associated with the transaction account. The limitations, as drafted, constitute a process that, under its broadest reasonable interpretation, covers a commercial interaction, but for the recitation of generic computer components. That is, other than reciting "with a least one processor", the drafted process is comparable to an advertising, marketing, sales activities or behaviors, business relationships process, i.e. a process aimed at receiving promotion acceptances and modifying the a promotion or the targeting of a promotion or a campaign associated with the promotion. If a claim limitation, under its broadest reasonable interpretation, covers performance of limitations of agreements in form of contracts, legal obligations, advertising, marketing, sales activities or behaviors, business relationships, but for the recitation of generic computer components, then it falls within the "Certain Methods of Organizing Human Activity — Commercial or Legal Interactions (e.g. agreements in form of contracts, legal obligations, advertising, marketing, sales activities or behaviors, business relationships)" grouping of abstract ideas. Accordingly, the claim recites an abstract idea.

Page 3

This abstract idea <u>is not integrated into a practical application</u>. In particular, stripped of those claim elements that are directed to an abstract idea, the remaining positively recited elements of the <u>independent claims</u> are directed to receiving information about computer device users, generating a match key, transmitting the match key, receiving information about a plurality of user transaction accounts based on the match keys, providing a selectable list of items, receiving information representing an item selection, associating the promotion on transaction account. These claim elements amount to no more than insignificant extra-solution activity (MPEP 2106.05(g).

The non-positively recited claim elements are the match key, the item on the list. While these descriptive elements may provide further helpful context for the claimed invention, they do not serve to integrate the abstract idea into a practical application.

The recited computer elements, i.e. one processor, a computer-readable medium, are recited at a high-level of generality (i.e. as a generic computing device performing generic computer functions of obtaining data, interpreting the obtained data and providing results), such that they amount to no more than mere instructions to apply the exception using generic computer components.

Accordingly, these additional claim elements do not integrate the abstract idea into a practical application, because they do not impose any meaningful limits on practicing the abstract idea. Per Step 2A, the claim is directed to <u>an abstract idea not integrated into a practical application</u>.

Page 4

Step 2B of the eligibility analysis concludes that the claim does not include additional elements that are sufficient to amount to significantly more than the judicial exception. Stripped of those claim elements that are directed to an abstract idea, not integrated into a practical application, the remaining positively recited elements of the independent claims are directed to receiving information about computer device users, generating a match key, transmitting the match key, receiving information about a plurality of user transaction accounts based on the match keys, providing a selectable list of items, receiving information representing an item selection, associating the promotion on transaction account. When considered individually, these additional claim elements represent "Insignificant Extra-Solution (Pre-Solution and/or Post-Solution) Activity", i.e. activities incidental to the primary process or product that are merely a nominal or tangential addition to the claims. Specifically, the limitations are considered presolution activity because they are mere gathering or pre-processing data/information in conjunction with the abstract idea. (MPEP 2106.05(g)) It is readily apparent that the claim elements are not directed to any specific improvements of the claims.

Furthermore, the <u>independent claims</u> contain descriptive limitations, not positively recited limitations of elements found in the independent claims and addressed above, such as describing the nature, structure and/or content of the match key, the item on the list. However, these elements do not require any steps or functions to be performed and thus do not involve the use of any computing functions. While these descriptive elements may provide further helpful context for the claimed invention, these elements do not serve to confer subject matter eligibility to the claimed invention since their individual and combined significance is still not heavier than the abstract concepts at the core of the claimed invention.

After stripping away the abstract idea claim elements, the additional positively recited steps and descriptive claim elements, the only remaining elements of the <u>independent claims</u> are directed to a processor, a computer-readable medium. When considered <u>individually</u>, these additional claim elements serve merely to implement the abstract idea using computer components performing computer functions. They do not constitute "Improvements to the

Functioning of a Computer or to Any Other Technology or Technical Field". (MPEP 2106.05(a)) It is readily apparent that the claim elements are not directed to any specific improvements of any of these areas.

When the <u>independent claims are considered as a whole, as a combination</u>, the claim elements noted above do not amount to any more than they amount to individually. The operations appear to merely apply the abstract concept to a technical environment in a very general sense – i.e. a computer receives information from another computer, processes that information and then sends a response based on processing results. The most significant elements of the claims, that is the elements that really outline the inventive elements of the claims, are set forth in the elements identified as an abstract idea. Therefore, it is concluded that the elements of the independent claims are directed to one or more abstract ideas and do not amount to significantly more. (MPEP 2106.05)

Further, Step 2B of the analysis takes into consideration <u>all dependent claims</u> as well, both individually and as a whole, as a combination.

Dependent Claim 2 (which is repeated in Claim 8) is not directed to any additional abstract ideas, but is directed to additional claim elements such as to modifying promotion, providing the modified promotion. Dependent Claim 5 (which is repeated in Claim 11) is not directed to any additional abstract ideas, but is directed to additional claim elements such as to modifying at least one of the promotions, targeting of the promotion or the campaign associated with the promotion. Dependent Claim 16 (which is repeated in Claim 20) is not directed to any additional abstract ideas, but is directed to additional claim elements such as to generating a first loyalty program and a second loyalty program. When considered individually, these additional claim elements represent "Insignificant Extra-Solution (Pre-Solution and/or Post-Solution) Activity", i.e. activities incidental to the primary process or product that are merely a nominal or tangential addition to the claims. Specifically, determine the probability of people to select a promotion, generating a first a second loyalty program are considered pre-solution activity because they are mere gathering or pre-processing data/information in conjunction with the abstract idea, while modifying promotion, providing the modified promotion are considered post-solution activity because they are mere outputting or post-processing results from executing the abstract idea. (see MPEP 2106.05(g)) It is readily apparent that the claim elements are not directed to any specific improvements of the claims.

Dependent Claim 3 (which is repeated in Claim 9) is not directed to any additional abstract ideas, but is directed to additional claim elements such as modifying a targeting of a promotion, generating response model to a promotion, generating user response prediction, transmitting the promotion to the user. If a claim limitation, other than reciting "with at least one processor," under its broadest reasonable interpretation, covers performance of limitations of agreements in form of contracts, legal obligations, advertising, marketing, sales activities or behaviors, business relationships, but for the recitation of generic computer components, then it falls within the "Certain Methods of Organizing Human Activity – Commercial or Legal Interactions (e.g. agreements in form of contracts, legal obligations, advertising, marketing, sales activities or behaviors, business relationships)" grouping of abstract ideas. Accordingly, the claim recites an abstract idea.

Page 6

Dependent Claim 4 (which is repeated in Claim 10) is not directed to any additional abstract ideas, but is directed to additional claim elements such as to modifying a campaign associated with the promotion, modifying performance results, modifying communication channels. If a claim limitation, other than reciting "with at least one processor," under its broadest reasonable interpretation, covers performance of limitations of agreements in form of contracts, legal obligations, advertising, marketing, sales activities or behaviors, business relationships, but for the recitation of generic computer components, then it falls within the "Certain Methods of Organizing Human Activity — Commercial or Legal Interactions (e.g. agreements in form of contracts, legal obligations, advertising, marketing, sales activities or behaviors, business relationships)" grouping of abstract ideas. Accordingly, the claim recites an abstract idea.

Dependent Claims 14-15 (which are repeated in Claims 18-19 respectively) are not directed to any abstract ideas and are not directed to any additional non-abstract claim elements. Rather, these non-positively recited claims provide further descriptive limitations of elements, such as describing the nature, structure and/or content of the promotion, the goods and services. However, these elements do not require any steps or functions to be performed and thus do not involve the use of any computing functions. While these descriptive elements may provide further helpful context for the claimed invention, these elements do not serve to confer subject matter eligibility to the invention since their individual and combined significance is still not heavier than the abstract concepts at the core of the claimed invention.

Moreover, the claims in the instant application <u>do not constitute significantly more</u> also because the claims or claim elements only serve to implement the abstract idea using computer components to perform computing functions (*Enfish*, see MPEP 2106.05(a)). Specifically, the computing system encompasses general purpose hardware and software modules, as disclosed in the application specification in fig1, fig2 and [0028]-[0041], including among others user terminal, printer, user mobile phone, web server, communication network, CPU< ROM, RAM, display, input device, network interface, storage device.

Page 7

When the <u>dependent claims are considered as a whole, as a combination</u>, the additional elements noted above appear to merely apply the abstract concept to a technical environment in a very general sense – i.e. a computer receives information from another computer, processes that information and then sends a response based on processing results. The most significant elements of the claims, that is the elements that really outline the inventive elements of the claims, are set forth in the elements identified in the independent claims as an abstract idea. The fact that the computing devices are facilitating the abstract concept is not enough to confer statutory subject matter eligibility. In sum, the additional elements do not serve to confer subject matter eligibility to the invention since their individual and combined significance is still not heavier than the abstract concepts at the core of the claimed invention. Therefore, it is concluded that the dependent claims of the instant application do not amount to significantly more either. (see MPEP 2106.05)

In sum, Claims 1-5, 7-11, 13-20 are rejected under 35 USC 101 as being directed to non-statutory subject matter.

# Claim Rejections - 35 USC § 112(a) Written Description (Possession)

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

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.

Claims 3, 9 are rejected under 35 USC 112(a) as failing to comply with the written description requirement. The claim 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(s), at the time the application was filed, had possession of the claimed invention.

The claims are rejected for reciting the subject matter which is not adequately described in the specification, in the drawings or in the original set of claims to satisfy the requirements as described in MPEP 2163.05 V: "While there is a presumption that an adequate written description of the claimed invention is present in the specification as filed, *In re Wertheim*, 541 F.2d 257, 262, 191 USPQ 90, 96 (CCPA 1976), a question as to whether a specification provides an adequate written description may arise in the context of an original claim. An original claim may lack written description support when (1) the claim defines the invention in functional language specifying a desired result but the disclosure fails to sufficiently identify how the function is performed or the result is achieved ..." Further "Even if a claim is supported by the specification, the language of the specification, to the extent possible, must describe the claimed invention so that one skilled in the art can recognize what is claimed. The appearance of mere indistinct words in a specification or a claim, even an original claim, does not necessarily satisfy that requirement. "*Enzo Biochem, Inc. v. Gen-Probe, Inc.*, 323 F.3d 956, 968, 63 USPQ2d 1609, 1616 (Fed. Cir. 2002) (holding that generic claim language appearing in *ipsis verbis* in the original specification did not satisfy the written description requirement)."

Claims 3, 9 recite the elements "generating a response model," "generating a prediction of users or group of users who will respond to the promotion." The application specification attempts to describe the terms at [0008]. No information, like calculation method or algorithm is provided; i.e. HOW the function is performed. In addition, the specification verbally recites (*ipsis verbis*) the language of Claims 3, 9. While the specification discloses the function, it discloses neither the necessary structure, nor the necessary algorithm to perform the function, i.e. HOW the calculation is performed.

The question is, given the disclosure, would a POSITA conclude that the inventor was in possession of the term in order to cause a system to perform the functions? The answer is clearly "no." It looks as if the invention recites terms that have neither structure nor algorithm.

Therefore, the subject matter was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Art Unit: 3682

For examination purpose, Examiner will interpret the terms as any type of analyzing and model generating, which is what the prior art of record discloses. The reference is provided for compact prosecution purpose.

Page 9

## Claim Rejections - 35 USC § 103

The following is a quotation of 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 through 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.

The factual inquiries set forth in Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- i. Determining the scope and contents of the prior art.
- ii. Ascertaining the differences between the prior art and the claims at issue.
- iii. Resolving the level of ordinary skill in the pertinent art.
- iv. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-3, 5, 7-9, 11, 13-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Otto et al (US 2012/0323661), in view of Upadhya et al (US 2014/0365284), in further view of Fordyce et al (US 2008/0228582).

**Regarding Claims 1, 7, 13, 17** – Otto discloses: A computer-implemented method for optimizing at least one of a promotion, a targeting of the promotion, and a campaign associated with the promotion, the method comprising:

generating a plurality of loyalty programs, each associated with at least one respective promotion that includes an offer associated with a first good and/or service, {see at least [0093], [0121], [0152], [0165], [0218]-[0220] loyalty programs associated with promotions, promotion of goods and services}

wherein each of the at least one respective promotion is formatted for distribution among a respective one of a plurality of channels; {see at least [0064]-[0065] use of kiosk or Internet or other POS devices (reads on channels); [0133] self-service kiosk}

Art Unit: 3682

receiving, with the at least one processor, a plurality of acceptances of the promotion, {see at least [0064]-[0065] marketing offer (reads on promotion) acceptance; acceptance of upsell or other marketing offers}

wherein the step of receiving the acceptances includes:

receiving, with the at least one processor from each of a plurality of respective publisher computing devices, information representing users of user-computing devices respectively having past or present data communication sessions with the respective publishers' computing devices, following each user's selection of the promotion; {see at least [0026] access transaction history of user of computing device; fig1, rc110, rc112, rc114, [0046] transaction history of user, transaction with entity; [0094] transaction history for account and subaccount}

Page 10

receiving, with the at least one processor ..., the information representing the plurality of transaction accounts respectively associated with the users; and {see at least fig4, rc408, [0316] accessing transaction history; [0369]; [0015]-[0016] multi-tiered account, account and subaccount (reads on plurality of transaction accounts); [0022]-[0023]}

receiving, with the at least one processor, information representing a selection of one of the respective items in the list representing a respective one of the plurality of transaction accounts by each of the respective user-computing devices; {see at least [0288] accessing transaction associated with end user (reads on information from selected account), responsive to history (reads on transaction account); [0369] transaction element arranged to access a transaction history (reads on selecting transaction account)}

for each of at least some of the respective users who redeemed the promotion,

associating, with the at least one processor, the promotion with the respective selected one transaction account represented by the selected one of the respective items in the list; and {see at least [0061]-[0062] account hierarchy, attractive desired transactions or incentives (reads on promotion); [0288] transaction (reads on promotion) associated with the transaction history (reads on transaction account)}

modifying, with the at least one processor as a function of the received selection of the one of the plurality of transaction accounts {see at least [0061]-[0062] favorable classification, more attractive desired transactions or incentives (reads on optimizing as a function of received selection)} and/or associating the promotion with a selected one transaction account at least one of: i) the promotion, ii) targeting of the promotion to other users, and iii) a campaign

associated with the promotion. {see at least [0061]-[0062] account hierarchy, attractive desired transactions or incentives (reads on promotion); [0288] transaction (reads on promotion) associated with the transaction history (reads on transaction account)}

Otto does not disclose, however, Upadhya discloses:

generating, with the at least one processor, respective match keys that are associated with the respective users and usable to access information representing a plurality of transaction accounts of each of the respective users; {see at least [0005]-[0007] master account may generate a unique key to authorize access to account;}

transmitting, with the at least one processor, to at least one respective computing device having access to the information representing the plurality of transaction accounts, the respective match keys; {see at least [0005]-[0007] transmit the key to a user associated with the account}

... in response to the transmitted match keys ... {see at least [0031] if the system matches the key, then the system may enable}

In addition, it would have been obvious to one of ordinary skill in the art, at the time of filing, to modify Otto to include the elements of Upadhya. One would have been motivated to do so, in order to control the access to the transaction account. Furthermore, the Supreme Court has supported that combining well known prior art elements, in a well-known manner, to obtain predictable results is sufficient to determine an invention obvious over such combination (see KSR International Co. v. Teleflex Inc. (KSR), 550 U.S.,82 USPQ2d 1385 (2007) & MPEP 2143). In the instant case, Otto evidently discloses generating a promotion campaign, receiving promotion acceptances and associating the promotion with a user transaction account. Upadhya is merely relied upon to illustrate the functionality of a match key for authorizing access in the same or similar context. As best understood by Examiner, since both generating a promotion campaign, receiving promotion acceptances and associating the promotion with a user transaction account, as well as a match key for authorizing access are implemented through well-known computer technologies in the same or similar context, combining their features as outlined above using such well-known computer technologies (i.e., conventional software/hardware configurations), would be reasonable, according to one of ordinary skill in the art. Moreover, since the elements disclosed by Otto, as well as Upadhya would function in the same manner in combination as they do in their separate embodiments, it would be reasonable

to conclude that their resulting combination would be predictable. Accordingly, the claimed subject matter is obvious over Otto / Upadhya.

Page 12

Otto, Upadhya does not disclose, however, Fordyce discloses:

providing, with the at least one processor, a selectable list of items, each respective item in the list representing a respective one of the plurality of transaction accounts; {see at least [0027] For example, the merchant can use a computer, such as a personal computer or a Point of Service (POS) device having an application that addresses, to a platform within a network, a request to form parameters for an offer on a selected inventory item of the merchant. The offer may be targeted to a set of eligible consumers having an account within the transaction processing system. The offer can be marketed to the set of eligible consumers. Each of the consumers within the set of eligible consumers may accept the offer and engage in a transaction with the merchant in accordance with the parameters of the offer within the loyalty program. The offer can then be honored, such as by applying a discount at the time of purchase or by facilitating a credit to the account within the transaction processing system.}

In addition, it would have been obvious to one of ordinary skill in the art, at the time of filing, to modify Otto, Upadhya to include the elements of Fordyce. One would have been motivated to do so, in order to better identify the user. Furthermore, the Supreme Court has supported that combining well known prior art elements, in a well-known manner, to obtain predictable results is sufficient to determine an invention obvious over such combination (see KSR International Co. v. Teleflex Inc. (KSR), 550 U.S.,82 USPQ2d 1385 (2007) & MPEP 2143). In the instant case, Otto, Upadhya evidently discloses generating a promotion campaign, receiving promotion acceptances and associating the promotion with a user transaction account. Fordyce is merely relied upon to illustrate the functionality of selectable items in correlation with transaction accounts in the same or similar context. As best understood by Examiner, since both generating a promotion campaign, receiving promotion acceptances and associating the promotion with a user transaction account, as well as selectable items in correlation with transaction accounts are implemented through well-known computer technologies in the same or similar context, combining their features as outlined above using such well-known computer technologies (i.e., conventional software/hardware configurations), would be reasonable, according to one of ordinary skill in the art. Moreover, since the elements disclosed by Otto, Upadhya, as well as Fordyce would function in the same manner in combination as they do in their separate embodiments, it would be reasonable to conclude that their resulting combination

Art Unit: 3682

would be predictable. Accordingly, the claimed subject matter is obvious over Otto, Upadhya / Fordyce.

Page 13

**Regarding Claims 2, 8 –** Otto, Upadhya, Fordyce discloses the limitations of Claims 1, 7. Otto further discloses: wherein receiving the acceptances further comprises:

receiving, with the at least one processor, information representing at least one of:

a type of offer included in the promotion; {see at least [0064]-[0065] upsell or other marketing offers; [0069], [0073]-[0074] manage use of coupons, purchase of discounted products; [0369] determine eligibility in response to the history}

customer segments that responded to the promotion; {see at least [0179] discounts and incentives for customers as a whole and/or by class, group, demographics} at least one respective delivery channel of the promotion; {see at least [0064]-[0065] kiosk or Internet or other POS devices (reads on delivery channels)}

at least one respective day, time, week and/or month when the promotion was provided or when promotion is redeemable; and {see at least [0069], [0072] temporal parameters; [0085] time between transactions; [0128] temporal parameters – day, week, month, year}

at least one of size, location, layout and creative elements of the promotion; {see at least [0069], [0078], [0080] maximum discount}

wherein modifying the promotion is further in accordance with at least some of the received information; and further comprising {see at least [0069], [0077]-[0080] incentive modification, maximum discount, adjusting an incentive discount; [0016]-[0017] comparing the transaction history with a metric; generating, using the comparison of the transaction history with the metric, a desired transaction involving the account and the business entity; and modifying the incentive using the AIP and the comparison of the transaction history with the metric; [0093]}

providing, to each of a plurality of user-computing devices and/or publisher computing devices, the modified promotion. {see at least [0016]-[0017] transmitting the incentive to account holder}

**Regarding Claims 3, 9** – Otto, Upadhya, Fordyce discloses the limitations of Claims 1, 7. Otto further discloses: further comprising:

modifying a targeting of the promotion to users in accordance with an individual user and/or group of users who selected the promotion, who selected a respective one transaction

Page 14

account, and/or who selected one transaction account associated with the promotion; {see at least [0016]-[0017] modifying incentive; [0069], [0083] rules defining loyal customers (reads on analyzing users / groups of users); identifying loyal customers; [0369] determine legibility in response to history (reads on analyzing individual user)}

generating, with the at least one processor as a function of the modified targeting, at least one response model; {see at least [0125]-[0127] generating or modifying the transaction, the incentive, incentive can be made more attractive if customer is a loyal customer (reads on response model); [0173] if customer is a loyal customer, incentive price is increased; [0093] automatically generate or modify the goal, self-learning, self-adapting (reads on response model)}

generating, with the at least one processor as a function of the at least one response model, a prediction of a user and/or group of users who will respond to the promotion; and {see at least [0125]-[0127] proclivity to accept offers (reads on based on the response model)}

transmitting, with the at least one processor as a function of the prediction, the promotion to the user and/or group of users. {see at least [0016]-[0017] transmitting incentive to account holder}

**Regarding Claims 5, 11** – Otto, Upadhya, Fordyce discloses the limitations of Claims 1, 7. Otto further discloses: further comprising:

modifying at least one of the promotion, targeting of the promotion, and the campaign associated with the promotion in accordance with user information associated with each of the respective users, {see at least [0409]-[0411] end user profile, score of the customer used to qualify end user for offer}

wherein the at least one processor is further configured to perform operations for optimizing at least one of the promotion, targeting of the promotion, and the campaign associated with the promotion in accordance with user information associated with each of the respective users, {see at least [0064]-[0065] enhancing or optimizing customer loyalty; [0126] incentive more attractive if customer is a loyal customer (reads mon optimizing); [0178] discounts (reads on promotions) designed to optimize; [0061]-[0062] favorable classification, more attractive desired transactions or incentives (reads on optimizing promotions)

wherein the user information includes at least one of demographics, geography, browsing behavior, asset ownership data, wealth data, and spending behavior. {see at least [0166] local customer behavior, area, region, geography, demographics}

Art Unit: 3682

**Regarding Claims 14, 18 –** Otto, Upadhya, Fordyce discloses the limitations of Claims 13, 17. Otto further discloses:

Page 15

wherein each promotion further includes an offer associated with a second good and/or service. {see at least [0064]-[0065] upsell offers (reads on additional, e.g. second good or service; [0137] to include upsells in the desired transaction; [0196] cross-selling (reads on complementary items, i.e. second good or service)}

**Regarding Claims 15, 19** – Otto, Upadhya, Fordyce discloses the limitations of Claims 14, 18. Otto further discloses:

wherein the first good and/or service and the second good and/or service are provided by different parties. {see at least [0244] cross-sell offer (reads on customer to buy related or complementary items); [0168] subsidizing incentive to buy, unrelated third party sponsor (reads on different parties)}

**Regarding Claims 16, 20 –** Otto, Upadhya, Fordyce discloses the limitations of Claims 13, 17. Otto further discloses:

wherein the at least one processor is further configured to perform operations for generating a first loyalty program for a first party and a second loyalty program for a second party. {see at least [0093] customer loyalty program; [0121] loyalty programs, membership in loyalty programs (reads on more than one loyalty program, which should include a second loyalty program as well)}

Claims 4, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Otto et al (US 2012/0323661), in view of Upadhya et al (US 2014/0365284), in further view of Fordyce et al (US 2008/0228582), in further view of Saenz et al (US 2003/0216966).

**Regarding Claims 4, 10** – Otto, Upadhya, Fordyce discloses the limitations of Claims 1, 7. Otto further discloses: further comprising

modifying a campaign associated with the promotion in accordance with at least one of:

performance results representing an individual user and/or group of users who selected the promotion, selected a respective one transaction account, and/or respectively have a selected one transaction account associated with the promotion; and [see at least [0093] perform maximization to metric, customer acceptance rate, profit

Application/Control Number: 15/701,100 Page 16

Art Unit: 3682

margin percentage, customer satisfaction information, inventory turnover (reads on analyzing performance results)}

Otto, Upadhya, Fordyce does not disclose, however, Saenz discloses: analyzing, with the at least one processor:

respective data communication channels used in connection with the performance results. {see at least [0032] analyzing multi-channel, direct mail, email, telemarketing; [0048] analyzing multi-channel marketing; [0075]-[0078] channel analysis (reads on analyzing communication channels)}

In addition, it would have been obvious to one of ordinary skill in the art, at the time of filing, to modify Otto, Upadhya, Fordyce to include the elements of Saenz. One would have been motivated to do so, in order to optimize promotion campaigns by modifying them based on performance results. Furthermore, the Supreme Court has supported that combining well known prior art elements, in a well-known manner, to obtain predictable results is sufficient to determine an invention obvious over such combination (see KSR International Co. v. Teleflex Inc. (KSR), 550 U.S.,82 USPQ2d 1385 (2007) & MPEP 2143). In the instant case, Otto, Upadhya, Fordyce evidently discloses generating a promotion campaign, receiving promotion acceptances and associating the promotion with a user transaction account. Saenz is merely relied upon to illustrate the functionality of modifying and launching a promotion campaign in the same or similar context. As best understood by Examiner, since both generating a promotion campaign, receiving promotion acceptances and associating the promotion with a user transaction account, as well as modifying and launching a promotion campaign are implemented through well-known computer technologies in the same or similar context, combining their features as outlined above using such well-known computer technologies (i.e., conventional software/hardware configurations), would be reasonable, according to one of ordinary skill in the art. Moreover, since the elements disclosed by Otto, Upadhya, Fordyce, as well as Saenz would function in the same manner in combination as they do in their separate embodiments, it would be reasonable to conclude that their resulting combination would be predictable. Accordingly, the claimed subject matter is obvious over Otto, Upadhya, Fordyce / Saenz.

Application/Control Number: 15/701,100 Page 17

Art Unit: 3682

Applicant's remarks and arguments have been fully considered.

Applicant respectfully disagrees with the OA conclusions and asserts that the presented claims fully comply with the requirements of 35 U.S.C. § 101. Further, Applicant is of the opinion that the prior art fails to teach Applicant's invention.

Examiner respectfully disagrees in both regards.

With respect to Applicant's Remarks as to the claims being rejected under 35 USC § 101.

## **Applicant submits:**

- A. The pending claims are not directed to a judicial exception.
- B. The pending claims contain an inventive concept. Furthermore, Applicant asserts that the Office has failed to meet its burden to establish that the pending claims do not contain an inventive concept.

**Examiner responds** – The arguments have been considered in light of Applicants' amendments to the claims. The arguments ARE NOT PERSUASIVE. Therefore, the rejection is maintained.

The instant claims, as a whole, do not amount to significantly more than the abstract idea itself. This is because the claims

- (a) do not effect an improvement to another technology or technical field;
- (b) do not amount to an improvement to the functioning of a computer itself;
- (c) do not move beyond a general link of the use of an abstract idea to a particular technological environment.

The claims merely amount to the application or instructions to apply the abstract idea on a generic computer, and are considered to amount to nothing more than requiring a generic system built around a computer with user interfaces to merely carry out the abstract idea itself. As such, the claims, when considered as a whole, are nothing more than the instruction to implement the abstract idea in a particular, albeit well-understood, routine and conventional technological environment.

#### More specific:

Applicant submits "The Office states that the claims recite an abstract idea. Applicant respectfully disagrees." Examiner has carefully considered, but doesn't find Applicant's

Art Unit: 3682

arguments persuasive. The eligibility analysis in the instant Office Action concludes at Step 2A Prong One:

Page 18

However, Claim 1, (which is repeated in Claims 7, 13, 17) is rejected under 35 U.S.C. 101 because the claim is directed to an abstract idea, a judicial exception, without reciting additional elements that integrate the judicial exception into a practical application. The claim recites receiving promotion acceptances, modifying the a promotion or the targeting of a promotion or a campaign associated with the promotion associated with the transaction account. The limitations, as drafted, constitute a process that, under its broadest reasonable interpretation, covers a commercial interaction, but for the recitation of generic computer components. That is, other than reciting "with a least one processor", the drafted process is comparable to an advertising, marketing, sales activities or behaviors, business relationships process, i.e. a process aimed at receiving promotion acceptances and modifying the a promotion or the targeting of a promotion or a campaign associated with the promotion. If a claim limitation, under its broadest reasonable interpretation, covers performance of limitations of agreements in form of contracts, legal obligations, advertising, marketing, sales activities or behaviors, business relationships, but for the recitation of generic computer components, then it falls within the "Certain Methods of Organizing Human Activity – Commercial or Legal Interactions (e.g. agreements in form of contracts, legal obligations, advertising, marketing, sales activities or behaviors, business relationships)" grouping of abstract ideas. Accordingly, the claim recites an abstract idea.

Applicant submits "In particular, the combination of features identified above define additional limitations that reflect an improvement to another technology or technical field, including loyalty programs and promotions." Examiner has carefully considered, but doesn't find Applicant's arguments persuasive. Applicant argues that the claims are patent-eligible because they result in an improvement in the technology field. Examiner respectfully disagrees. It is not clear that the claims are directed to an improvement to an existing technology. The claims appear directed to an improvement to modifying promotions, targeting of promotions or a campaign associated with the promotion. The technological improvements identified by the courts in Diehr, Enfish, and Bascom are significantly different than programming a computer to modifying promotions, targeting of promotions or a campaign associated with the promotion. The disclosure fails to explicitly discuss an improvement to any underlying technology executing the identified abstract idea. The original disclosure fails to discuss prior art modifying promotions, targeting of promotions or a campaign associated with the promotion engines. In

spite of disclosing some perceived advantages which allegedly are brought about by the instant application, the original disclosure fails to discuss prior art modifying promotions, targeting of promotions or a campaign associated with the promotion engines. The original disclosure therefore does not suggest that the particular modifying promotions, targeting of promotions or a campaign associated with the promotion engine structures being claimed is an improvement over prior art systems. The fact that the disclosure failed to identify a problem and the fact that the original disclosure fails to indicate how or why the claimed arrangement of system elements enables an improvement suggests that the claimed invention is not directed to this improvement. Instead, it appears Applicant has attempted to identify, after the fact, some unsubstantiated benefit of the claimed matter in an effort to exhibit the claims are directed to a technological improvement. (see MPEP 2106.05(a); (i) specification requirements in regard to the improvements (should describe the improvement): *McRO v Bandai* – specification provides explanation, *Affinity Labs* – specification does not provide explanation; (ii) claim requirements in regard to the improvements (should recite the improvement): *Enfish* – claim reflects the improvement, *Intellectual Ventures* – claim does not reflect the improvement).

Page 19

Applicant submits "More particularly, and without limitation, the additional feature of ... are indicative of integration of an abstract idea into a practical application." Examiner has carefully considered, but doesn't find Applicant's arguments persuasive. The eligibility analysis in the instant Office Action concludes at Step 2A Prong Two:

This abstract idea <u>is not integrated into a practical application</u>. In particular, stripped of those claim elements that are directed to an abstract idea, the remaining positively recited elements of the <u>independent claims</u> are directed to receiving information about computer device users, generating a match key, transmitting the match key, receiving information about a plurality of user transaction accounts based on the match keys, providing a selectable list of items, receiving information representing an item selection, associating the promotion on transaction account. These claim elements amount to no more than insignificant extra-solution activity (MPEP 2106.05(g).

The non-positively recited claim elements are the match key, the item on the list. While these descriptive elements may provide further helpful context for the claimed invention, they do not serve to integrate the abstract idea into a practical application.

The recited computer elements, i.e. one processor, a computer-readable medium, are recited at a high-level of generality (i.e. as a generic computing device performing generic computer functions of obtaining data, interpreting the obtained data and providing results), such

Art Unit: 3682

that they amount to no more than mere instructions to apply the exception using generic computer components.

Accordingly, these additional claim elements do not integrate the abstract idea into a practical application, because they do not impose any meaningful limits on practicing the abstract idea. Per Step 2A, the claim is directed to <u>an abstract idea not integrated into a practical application</u>.

Applicant submits "Further, applicant submits that even assuming, arguendo, that the claims are directed to a judicial exception (as the Office concludes), applicant respectfully submits that the combination of features identified above and recited in the independent claims provide additional elements that are sufficient to amount to significantly more than the judicial exception." Examiner has carefully considered, but doesn't find Applicant's arguments persuasive. The eligibility analysis in the instant Office Action concludes at Step 2B:

When the <u>independent claims are considered as a whole, as a combination</u>, the claim elements noted above do not amount to any more than they amount to individually. The operations appear to merely apply the abstract concept to a technical environment in a very general sense – i.e. a computer receives information from another computer, processes that information and then sends a response based on processing results. The most significant elements of the claims, that is the elements that really outline the inventive elements of the claims, are set forth in the elements identified as an abstract idea. Therefore, it is concluded that the elements of the independent claims are directed to one or more abstract ideas and do not amount to significantly more. (MPEP 2106.05)

It becomes self-evident that there are no meaningful limitations in the claims that transform the judicial exception into a patent eligible application such that the claims amount to significantly more than the judicial exception itself. Therefore, the rejection under 35 U.S.C. § 101 is maintained.

With respect to Applicant's Remarks as to the Claims 2, 4-5, 8, 10-11 being rejected under 35 USC § 112(a).

The rejection is withdrawn as a result of the amendments.

Application/Control Number: 15/701,100 Page 21

Art Unit: 3682

## With respect to Applicant's Remarks as to the claims being rejected under 35 USC § 103.

Applicant submits "Applicant respectfully submits that the "key" of Upadhya is not tantamount to applicant's "matching keys" and that the features of applicant's independent claims are not taught or suggested by Upadhya." Examiner has carefully considered, but doesn't find Applicant's arguments persuasive. Upadhya discloses both "generating ... match keys" at [0005]-[0007] master account may generate a unique key to authorize access to account and "transmitting ... match keys" at [0005]-[0007] transmit the key to a user associated with the account. The keys are associated with a respective user. Moreover, the match keys are usable to access information. (see [0005] As a result, a user of the sub-account may seamlessly access multiple master accounts within the same online portal and experience similar user experiences when accessing the different master accounts; master accounts reads on information). Therefore, the matching keys disclosed by Upadhya are usable to receive information representing a "plurality of transaction accounts respectively associated with the users."

Applicant submits "Moreover, applicant submits that there is no teaching or suggestion in Otto and Upadhya of applicant's claimed combination of features, including receiving "information representing users of user-computing devices respectively having past or present data communication sessions with the respective publishers' computing devices," Examiner has carefully considered, but doesn't find Applicant's arguments persuasive. Otto discloses at [0026] access transaction history of user of computing device; fig1, rc110, rc112, rc114, [0046] transaction history of user, transaction with entity; [0094] transaction history for account and subaccount. Therefore, Otto discloses the claim limitation.

Applicant submits remarks and arguments geared toward the amendments. Examiner has carefully reviewed and considered Applicant's remarks, however they ARE MOOT in light of the fact that they are geared towards the amendments.

The other arguments presented by Applicant continually point back to the above arguments as being the basis for the arguments against the other 103 rejections, as the other arguments are presented only because those claims depend from the independent claims, and the main argument above is presented against the independent claims. Therefore, it is believed that all arguments put forth have been addressed by the points above.

Art Unit: 3682

Examiner has reviewed and considered all of Applicant's remarks. The changes of the grounds for rejection, if any, have been necessitated by Applicant's extensive amendments to the claims. Therefore, the rejection is maintained, necessitated by the extensive amendments and by the fact that the rejection of the claims under 35 USC § 101 has not been overcome.

Page 22

#### Conclusion

Applicants' amendments necessitated the new ground(s) of rejection presented in this Office action. **THIS ACTION IS MADE FINAL**. 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 office 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 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 mailing date of this office action.

## Inquiries

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Radu Andrei whose telephone number is 313.446.4948. The examiner can normally be reached on Monday – Friday 8:30am – 5pm EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ilana Spar can be reached at (571)270-7537. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

As detailed in MPEP 502.03, communications via Internet e-mail are at the discretion of the applicant. Without a written authorization by applicant in place, the USPTO will not respond via Internet e-mail to any Internet correspondence which contains information subject to the confidentiality requirement as set forth in 35 U.S.C. 122. A paper copy of such correspondence will be placed in the appropriate patent application. The following is a sample authorization form which may be used by applicant:

"Recognizing that Internet communications are not secure, I hereby authorize the USPTO to communicate with me concerning any subject matter of this application by electronic mail. I understand that a copy of these communications will be made of record in the application file."

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

Application/Control Number: 15/701,100 Page 23

Art Unit: 3682

would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (in U.S.A. or Canada) or 571-272-1000.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks P.O. Box 1450 Alexandria, VA 22313-1450

or faxed to 571-273-8300

Hand delivered responses should be brought to the:

United States Patent and Trademark Office Customer Service Window Randolph Building 401 Dulany Street Alexandria, VA 22314

/Radu Andrei/ Primary Examiner, AU 3682