



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.
17/023,029	09/16/2020	Philip McDonnell	GGLD-442-CON	9888
100462	7590	06/27/2022		
Dority & Manning P.A. and Google LLC			EXAMINER	
Post Office Box 1449			OUSSIR, EL MEHDI	
Greenville, SC 29602				
			ART UNIT	PAPER NUMBER
			3685	
			NOTIFICATION DATE	DELIVERY MODE
			06/27/2022	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):

usdocketing@dority-manning.com

Notice of Pre-AIA or AIA Status

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

This is a first action on the merits.

Claims 21-40 are examined. Claims 1-20 are cancelled.

The information disclosure statements submitted have been considered.

Claim Objections

Claim 21 is directed to a system, the system comprising “memory and one or more processors to...” Under the broadest reasonable interpretation, the claim can be rejected under any teaching which contains a memory and a processor capable of performing any function. The claim must be amended to recite the proper Beauregard language to overcome this issue. The claim should recite, a system... comprising: a memory storing instructions, when executed by at least one processor, causes the processor to perform operations comprising... identifying...”

Appropriate correction is required.

Claim Rejections - 35 USC § 112

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.

Claims 21-40 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 applications subject to pre-AIA 35 U.S.C. 112, the inventor(s), at the time the application was filed, had possession of the claimed invention.

Per claims 21 and 31, the claims recite “receive, from the client device, location data of the client device indicative of a candidate location, the location data comprising an identifier of the client device and a received signal strength value;” and “generate, responsive to receipt of the validation response, a location model for the candidate location with the location data received from the client device and the validation response.” Emphasis added.

It is not known how the candidate location can be determined as being inaccurate based on a policy, yet a location model is generated for the candidate location using (1) location data received and (2) the validation response. The validation response never includes a validation of the candidate location. The validation response is only based on validating that a transaction data exists based only on the client device. The location is never used for the validation. Therefore, it is not known how a determination can be made that the candidate location is inaccurate and yet still manage to generate a location model based on a validation that does not actually validate the location information used to determine the location model.

The specification is devoid of any support for how the claim limitations are to be carried out. The specification focuses on multiple sensors providing device location information when a first method of determining user location (GPS) is not successful.

As a result, the claims and all dependent claims are rejected for mere dependence on the rejected claims.

Per claims 25 and 35 the Specification discloses that the wireless access points, see at least Figure 2 and related text, are used to enhance user location determination. The claims at issue are contrary to the Specification, claiming that the determination of the user location can be inaccurate based on data received from the access points. No support is found for how the access point data can result in inaccurate location determination.

Per claims 29-30 and 39-40, the claims recite “the one or more processors to generate the location model based on one or more negative indicators that the client device detect an available access point not associated with the candidate location” and “the one or more processors to update the location model based at least in part on a social media post tagged with location information” respectively.

Because the location model was generated “responsive to receipt of the validation response, a location model for the candidate location with the location data received from the client device and the validation response” it is not known how the location model can be further generated based on “on one or more negative indicators that the client device detect an available access point not associated with the candidate location.” No support is found for how the combination of the independent claims and the claims at issue can be carried out after the model has already been generated.

It is also not known how the location model, which has already been generated, can be updated merely based on a tag via a media post. The tag is not associated/linked to the validation or determination of the user being at the location for which the model was generated. The tag can occur at a different time and when the user is not at the location for which the model was generated, therefore, it is not known how the model, which has been generated, can further be altered as claimed. The specification fails to disclose how the claimed limitation at issue can be carried out post a generation of a location model based on merely on received location data of the device and the validation response.

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.

Claims 21-40 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 applications subject to pre-AIA 35 U.S.C. 112, the applicant), regards as the invention.

Claims 21 and 31 recite “receive, from the client device, location data of the client device indicative of a candidate location, the location data comprising an identifier of the client device and a received signal strength value; determine that the location data for the candidate location is inaccurate based on a policy; transmit, responsive to the determination that the location data is inaccurate, a request to a transaction data provider for a record of a past transaction associated

with the identifier of the client device at the candidate location; receive, from the transaction data provider responsive to the request, a validation response that indicates the transaction data provider has the record of the past transaction associated with the identifier of the client device; generate, responsive to receipt of the validation response, a location model for the candidate location with the location data received from the client device and the validation response.”

The claims are not clear because the model requires that the location model be generated in response to the validation response and client device location data. Because the validation as claimed, never actually validates the location, the model cannot be generated. As a result, the claims are determined to be indefinite.

Any teaching of a model portraying user location data being generated in any means will be determined as reading on the claim limitations.

The claims and all dependent claims are rejected for mere dependence on the rejected claims.

Claim Rejections - 35 USC § 101

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.

11. Claims 21-40 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 21-40 fall within at least one of the four categories of patent eligible subject matter (process, machine, manufacture, or composition of matter).

Claims 21-40 are rejected under 35 U.S.C. 101 because the claimed invention is directed to an abstract idea of selecting a content item for presentation to a user based on analyzing information received about the user without significantly more.

Claim 31, for instance, recites in part:

- a. A method of validating accuracy of location data, comprising:
- b. identifying... an interaction...;
- c. receiving... location data... indicative of a candidate location, the location data comprising an identifier...;
- d. determining... that the location data for the candidate location is inaccurate based on a policy;
- e. transmitting... responsive to the determination that the location data is inaccurate, a request... for a record of a past transaction associated with the identifier.. at the candidate location;
- f. receiving... a validation response that indicates... the record of the past transaction associated with the identifier...;
- g. generating... responsive to receipt of the validation response, a location model for the candidate location with the location data received... and the validation response;
- h. determining... based at least in part on the location model for the candidate location, a location for [user]...; and
- i. selecting... based on the location for the [user]... and responsive to the interaction..., a content item for presentation...

The abstract idea is characterized under certain methods of organizing human activity. Wherein the claims clearly capture fundamental economic principles, wherein advertisements are displayed to users based on the user being at a certain location which optimizes sales. Also, the claims further support the characterization of falling under mitigating risk because the advertisement is only displayed to the users based on the data obtained and validated about the user.

The judicial exception is not integrated into a practical application. The claims recite the following additional elements: one or more processors, a social media application, a client device, a received signal strength value, transaction data provider, location model, and a memory. The additional elements are recited at a high level of generality, wherein the claims recite general means for collecting and sending data, validation of data, and output of data based on the validation. The additional elements merely automate the abstract idea. Each of the additional elements / limitations are no more than mere instructions to apply the exception using generic computer components. The combination of these additional elements is no more than mere instructions to apply the exception using a generic computer component. Accordingly, even in combination, the additional elements do not integrate the abstract idea into a practical application.

The claims do not include additional elements that are sufficient to amount to significantly more than the judicial exception. As discussed above with respect to integration of the abstract idea into a practical application, the additional elements amount to merely instructions to apply the exception using generic computer components. The claim limitations do not improve another technology or technical field, improve the functioning of a computer itself, apply the abstract idea with, or by use of, a particular machine (not a generic computer, not

adding the words "apply it" or words equivalent to "apply the abstract idea", not mere instructions to implement an abstract idea on a computer, adding insignificant extra solution activity to the judicial exception, generally linking the user of the judicial exception to a particular technological environment or field of use), effects a transformation or reduction of a particular article to a different state or thing, or adds meaningful limitations that amount to more than generally linking the use of the abstract idea to a particular technological environment. Mere instructions to apply an exception using generic computer components cannot provide an inventive concept.

The dependent claims further describe the abstract idea. The dependent claims do not include additional elements that integrate the abstract idea into a practical application or that provide significantly more than the abstract idea. The dependent claims recite additional elements such as determining whether the client device is inside or outside the location, receiving location data via GPS and based on a time threshold, and determining wireless access point connection as being inaccurate. These additional elements are also recited at a high level of generality. They are not claimed in a technical way to result in the claims amounting to a practical application.

The claims are not patent eligible.

Examiner Comments

U.S. Patent Application Publication 2013/0102283 to Lau et al. ("Lau") teaches determining candidate location based on a signal strength value and validating a user is at the location indicated based on comparing a past transaction at the same candidate location. Lau also

discloses generating a location model based on user data and validation of the user being at a merchant location.

See Lau at least at Paragraphs 00007, 0081-0101 and Figures 1-4 and 6-7.

U.S. Patent 8,295,898 to Ashfield et al. (“Ashfield”) teaches record of past transaction data associated with a user being at a location of the past transaction data. Ashfield also teaches sending a request from entity to another for the validation of the past transaction data determination.

U.S. Patent Application Publication 20030065805 to Barnes et al. (Barnes) teaches the communication criteria data stored in the user's device 101 and the location of the user may also be used by remote computer systems, for example, to target advertising and provide the user with location relevant information. One example of such a system employs an ACS designed to coordinate the delivery of advertising and content for the shopping complex. Referring to FIG. 7, the ACS establishes user location information at step 450, determines transmission selection criteria (temporal data, CCD, targeting criteria, etc.) at step 455, and selects and transmits an advertisement at step 460. In addition, in some instances the ACS will receive information relating to the user's response (receipt, viewing, presentation, or action in response) to the transmission at step 465 and perform an incentive transaction at step 470. Each access point (AP) 230 of this example has a separate network address so that data received from the user device 101 and provided to the ACS is determined by the ACS to have come from a particular AP 230. Thus, knowing the AP 230 with which the device 101 is communicating, and the range of the AP 230 (if desired or necessary), the ACS can determine the approximate location of the user in the

parking area, in a thoroughfare 223, and/or in a vender store location 220. In addition, as the device 101 communicates through a sequence of APs 230, the ACS can determine a plurality of locations for the user and, therefore, determine anticipated location data for the user carrying the device. Anticipated location data may also be determined by determining intended activity (e.g., from CCD), receiving product purchase data from a VCS (indicating the user will be traveling to the vender), and/or receiving past GPS data. Thus, the selection of an advertisement based on location data may be a selection based on the current location data or anticipated location data. The number, placement, and communication range of the APs 230 are design choices. If more accurate location data is desired, more access points 230, perhaps with smaller communication ranges, may be used. While in this example embodiment, the location data is determined through an access point location method, alternate embodiments may simply request that the device 101 transmit location data that is determined by the device's GPS receiver or through other means. In addition, depending on the network and other design factors, the access points may or may not have overlapping communication ranges. Selection of the advertisements are based, at least in part, on the degree to which the targeting criteria of the advertisement matches the CCD, location data and/or temporal data of the user. For example, ads for a particular vender, such as a coffee shop, may include targeting criteria that dictates that all users with location data that includes entering a particular door (and who, therefore, are likely to pass by the vender), and who enter prior to 11AM (temporal data) are to receive an advertisement for coffee along with an electronic coupon offering a ten percent discount. Some advertisements may not have associated targeting criteria as the advertiser may not wish to target the advertisement, but instead have all users receive the advertisement. In addition, selection of an advertisement may or may not require a

complete match of the targeting criteria with location data, CCD and/or temporal data (depending on the desire of the advertiser).

U.S. Patent Application Publication 20190325503 to Fein et al. (Fein) teaches using a mobile application of a merchant and receiving a tag of the user location on the mobile application to allow the determination of user location generation to be enhanced. The apparatus is provided including at least one processor and at least one memory including computer program code, the at least one memory and computer program code configured to, with the processor, cause the apparatus to at least receive an application device identifier from an application device, associate an application device with a location tag, receive blink data from a location tag, calculate a location data based on the blink data, receive an event occurrence indication, generate a camera data request based on the location data and the event occurrence, transmit a camera data request, and receive camera data from an application device. In an example embodiment of the apparatus, the at least one memory and the computer program code are further configured to receive a tag-application device correlator and the associating an application device with a location tag is further based on the tag-application device correlator. In some example embodiments of the apparatus, the at least one memory and the computer program code are further configured to receive an indication of camera data and the camera data request is further based on the indication of camera data.

U.S. Patent Application Publication 20190378143 to Volpi et al. (Volpi) teaches the located consumer record may be updated to record the current transaction and searched for applicable loyalty rewards. Coupon server 2114 (FIG. 21) may receive information about the

current transaction as well as information about previous transactions contained in the consumer record and may determine if the consumer is eligible for any loyalty rewards. If the consumer is eligible for a reward, the system may enter that reward in the consumer record. Such reward may be based on previous consumer activity, current purchase items, consumer profile information, or any other criteria. A reward may also be entered into the consumer's account as a result of the consumer signing up for the loyalty program. The consumer record may also contain a listing of rewards previously acquired by the consumer and the system may search the consumer record for such rewards that may be redeemed with the current purchase. the located consumer record may be updated to record the current transaction and searched for applicable loyalty rewards. The coupon server 2114 (FIG. 21) may receive information about the current transaction as well as information about previous transactions contained in the consumer record and may determine if the consumer is eligible for any loyalty rewards. If the consumer is eligible for a reward, the system may enter that reward in the consumer record. Such reward may be based on previous consumer activity, current purchase items, consumer profile information, or any other criteria. A reward may also be entered into the consumer's account as a result of the consumer signing up for the loyalty program. The consumer record may also contain a listing of rewards previously acquired by the consumer and the system may search the consumer record for such rewards that may be redeemed with the current purchase.

Further references were considered and as a result of the indefiniteness of the claims and their lack of clarity, the references are not determined to teach the claimed limitations in a manner that would have been obvious to one of ordinary skill in the art.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure is listed on for PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to EL MEHDI OUSSIR whose telephone number is (571)270-0191. The examiner can normally be reached on M-F 9AM - 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Neha W. Patel can be reached on 571-270-1492. The fax phone number for the organization where this application or proceeding is assigned is 571-270-1191.

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.

Sincerely,

/EL MEHDI OUSSIR/
Primary Examiner, Art Unit 3685

<i>Notice of References Cited</i>	Application/Control No. 17/023,029		Applicant(s)/Patent Under Reexamination McDonnell et al.	
	Examiner EL MEHDI OUSSIR		Art Unit 3685	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-11288657-B1	03-2022	Lewis; John	G06Q20/327	1/1
*	B	US-20190325503-A1	10-2019	Fein; Michael	G07F17/0014	1/1
*	C	US-10440169-B1	10-2019	Gordon; George Andrew	G06F3/04886	1/1
*	D	US-20190246238-A1	08-2019	Crutchfield; Keith	H04W4/08	1/1
*	E	US-10051103-B1	08-2018	Gordon; George Andrew	H04M1/72448	1/1
*	F	US-20180143756-A1	05-2018	Mildrew; James	G06F3/0482	1/1
*	G	US-20180032997-A1	02-2018	Gordon; George A.	G06Q30/0269	1/1
*	H	US-9538332-B1	01-2017	Mendelson; Ehud	H04W48/10	1/1
*	I	US-9110982-B1	08-2015	Welsh; Martha	H04W4/029	1/1
*	J	US-20150213295-A1	07-2015	Ginsburg; David	H04W64/00	340/10.1
*	K	US-20150178817-A1	06-2015	Fein; Michael	G06Q30/0635	705/26.81
*	L	US-20140365944-A1	12-2014	Moore; Bradford A.	G01C21/3679	715/772
*	M	US-20130325856-A1	12-2013	Soto Matamala; Leonardo A.	G06F16/248	707/724

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
	N	CN-102822855-B	11-2016	CN	BHAVNISH L	G06Q10/00
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	Smart cities of the future. https://link.springer.com/content/pdf/10.1140/epjst/e2012-01703-3.pdf (Year: 2011)
	V	
	W	
	X	

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

<i>Notice of References Cited</i>	Application/Control No. 17/023,029		Applicant(s)/Patent Under Reexamination McDonnell et al.	
	Examiner EL MEHDI OUSSIR		Art Unit 3685	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-20130254227-A1	09-2013	Shim; David	G06F16/245	707/769
*	B	US-20130102248-A1	04-2013	Jay; Matthew	H04W4/30	455/41.1
*	C	US-20110161276-A1	06-2011	Krumm; John C.	G06F16/9537	706/50
*	D	US-20160232515-A1	08-2016	JHAS; Amit	G06Q20/3278	1/1
*	E	US-20190378143-A1	12-2019	Volpi; Matthew	G06Q30/02	1/1
*	F	US-20130290096-A1	10-2013	Lizotte, III; Omer D.	G06Q30/0246	705/14.45
*	G	US-20120022944-A1	01-2012	Volpi; Matthew	G06Q30/0207	705/14.1
*	H	US-20120022930-A1	01-2012	Brouhard; Jesse	G06Q30/0229	705/14.3
*	I	US-20110238517-A1	09-2011	Ramalingam; Harsha	H04W4/02	705/16
*	J	US-20110093339-A1	04-2011	Morton; Timothy B.	G06Q30/02	705/14.58
*	K	US-20110238476-A1	09-2011	Carr; Michael	G06Q30/00	705/14.1
*	L	US-20130246300-A1	09-2013	Fischer; Terrence	G06Q30/0246	705/347
	M					

FOREIGN PATENT DOCUMENTS

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

NON-PATENT DOCUMENTS

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

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