APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/105,006	08/20/2018	Zornitsa KOZAREVA	Y10981US01	1066

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EXAMINER
HAMILTON, MATTHEW L

ART UNIT	PAPER NUMBER
3682	

NOTIFICATION DATE	DELIVERY MODE
06/22/2020	ELECTRONIC

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

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

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

docketing@cooperlegalgroup.com

-- 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 20 August 2018.
   ☐ 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) 1-20 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   5a) Of the above claim(s) ____ is/are withdrawn from consideration.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) 1-20 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 20 August 2018 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)   3) ☐ Interview Summary (PTO-413)
                                                                Paper No(s)/Mail Date _____.
2) ☐ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b)   4) ☐ Other: _____.
   Paper No(s)/Mail Date _____.

DETAILED ACTION

This action is in response to the initial filing filed on August 20, 2018. Claims 1-20 have been

examined and are currently pending.

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.

Inventorship

This application currently names joint inventors. In considering patentability of the claims the

examiner presumes that the subject matter of the various claims was commonly owned as of the

effective filing date of the claimed invention(s) absent any evidence to the contrary. Applicant is advised

of the obligation under 37 CFR 1.56 to point out the inventor and effective filing dates of each claim that

was not commonly owned as of the effective filing date of the later invention in order for the examiner

to consider the applicability of 35 U.S.C. 102(b)(2)(C) for any potential 35 U.S.C. 102(a)(2) prior art

against the later invention.

Claim Objections

Claims 3 and 5-8 are objected to because of the following informalities: Please add a colon after

the term, "programmed to". Appropriate correction is required.

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.

Claims 1-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to an abstract idea without significantly more. Independent claims 1, 9 and 14 recite the limitations, "generating a cluster group of audience feed data, the cluster group comprising audience feed data from across a plurality of audience segments sharing a common high-frequency term; identifying understandable terms from tag information by removing noisy terms from the cluster group; and generating a performance report by inserting the understandable terms into a report template."

Independent claim 14 recites the limitations, "generating a cluster group of audience feed data, the cluster group comprising audience feed data from across a plurality of audience segments sharing a common high-frequency term; identifying understandable terms from tag information by removing noisy terms from the cluster group; and generating a performance report by inserting the understandable terms into a report template." are directed to the abstract idea certain methods of organizing human activity under advertising and marketing. The claims recite identifying a set of keywords associated with audience segment (separating individuals based on characteristics for advertising) and removing noisy keywords to generate a performance report based on audience segmentation which are directed to advertising and marketing.

The recited claim limitations do not recite a device or computer actively performing the steps recited. Additionally, under step 2A of "integration into a practical application" requires:

- Improvement to the functioning of a computer, or an improvement to any other technology or technical field

• Applying or using a judicial exception to effect a particular treatment or prophylaxis for a disease or medical condition

• Applying the judicial exception with, or by use of a particular machine.

• Effecting a transformation or reduction of a particular article to a different state or thing

• Applying or using the judicial exception in some other meaningful way beyond generally linking the use of the judicial exception to a particular technological environment, such that the claim as a whole is more than a drafting effort designed to monopolize the exception

The applicant has not shown or demonstrated any of the requirements described above under "integration into a practical application" under step 2A. Specifically, the applicant's limitations are not "integrated into a practical application" because they are adding words "apply it" with the judicial exception, or mere instructions to implement an abstract idea merely as a tool to perform an abstract idea (see MPEP 2106.05(f)). In addition, independent claim 14 does not recite a machine or computer actively performing critical steps of the invention.

The claim(s) does/do not include additional elements that are sufficient to amount to significantly more than the judicial exception because the steps or acts performed in independent claims 1, 9, and 14 are a mere instruction to apply the abstract idea and require no more than a generic computer to perform generic computer functions. The generic computer functions are well-understood, routine and conventional activities known in the industry. The applicant's specification discloses, "FIG. 3 is a schematic diagram illustrating an example embodiment of a server. A server 300 may include different hardware configurations or capabilities. For example, a server 300 may include one or more central processing units 322, memory 332 that is accessible to the one or more central processing units 322, one or more medium 630 (such as one or more mass storage devices) that store application programs 342 or data 344, one or more power supplies 326, one or more wired or wireless network interfaces 350, one or more input/output interfaces 358. The memory 332 may include non-transitory

storage memory and transitory storage memory." (paragraph 0037) and "A server 300 may also include

one or more operating systems 341, such as Windows Server, Mac OS X, Unix, Linux, FreeBSD, or the

like. Thus, a server 300 may include, as examples, dedicated rackmounted servers, desktop computers,

laptop computers, set top boxes, integrated devices combining various features, such as two or more

features of the foregoing devices, or the like." (paragraph 0038). The claims do not include additional

elements or limitations individually or in combination that are sufficient to amount to significantly more

than the judicial exception. Specifically, the individual elements of a processor, non-transitory storage

medium, a memory, computer server, and database amount to no more than implementing an idea with

a computerized system. The additional elements taken in combination add nothing more than what is

present when the elements are considered individually. In addition, the combination does not provide

any effect regarding improving the functioning of the computer or any improvement to another

technology. Viewed as a whole, these additional claim element(s) individually or in combination do not

provide meaningful limitation(s) to transform the abstract idea into a patent eligible application of the

abstract idea such that the claim(s) amounts to significantly more than the abstract idea itself.

Dependent claims 2-8, 10-13, and 15-20 are rejected as ineligible subject matter under 35 U.S.C.

101 based on a rationale similar to the claims from which they depend.

Claim Rejections - 35 USC § 112

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.

Claim 16 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 16 recites the limitation "the computer server" in line 4. There is insufficient antecedent

basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

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.

The following is a quotation of the appropriate paragraphs of 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 –

(a)(2) the claimed invention was described in a patent issued under section 151, or in an application
for patent published or deemed published under section 122(b), in which the patent or application, as
the case may be, names another inventor and was effectively filed before the effective filing date of
the claimed invention.

Claim(s) 1-4, 9-11, and 14-17are rejected under 35 U.S.C. 102(a)(2) as being anticipated by Benis

et al. US Publication 2015/0235246 A1.

Claims 1, 9, and 14:

As per claim 1, 9, and 14, **Benis** teaches the system, non-transitory computer readable medium,

and method comprising:

a processor and a non-transitory storage medium accessible to the processor (paragraphs 0062

and 0066 ("processing apparatus" and "computer readable medium");

a memory storing a database (paragraphs 0090-0091 "memory"); and

a computer server in communication with the memory and the database, the computer server

programmed to (paragraphs 0091 and 0093-0094 "server"):

generate a cluster group of audience feed data, the cluster group comprising audience feed data

from across a plurality of audience segments sharing a common high-frequency term (paragraphs 0110-

0112 "As another example, a user of method 400 may decide to treat users of a social network on a

decade basis, namely--cluster together all users born in the same decade. Accordingly, a "birth year"

demographic datum appearing in the second set of keywords may be clustered decade wise; for

example, "1981", "1983" and "1989" may be clustered into "1980's".");

identify understandable terms from tag information by removing noisy terms from the cluster

group (paragraph 0112 "Two, detection of keywords which represent the same or a similar demographic

meaning, and deletion of all but one of such similar keywords; or, alternatively, implanting of a new

keyword in the set, which represents all of these similar keywords. For instance, a user of method 400

may decide to equally treat Internet users which performed searches for city names inside the same

state; accordingly, by way of example, the keywords "Seattle", "Tacoma", "Olympia", "Port Angeles" will

all be replaced by "Washington". As another example, a user of method 400 may decide to treat users

of a social network on a decade basis, namely--cluster together all users born in the same decade.

Accordingly, a "birth year" demographic datum appearing in the second set of keywords may be

clustered decade wise; for example, "1981", "1983" and "1989" may be clustered into "1980's"."); and

generate a performance report by inserting the understandable terms into a report template

(paragraphs 0127-0133 "The cross-channel audience segmentation report may be presented to the

advertiser, to provide useful insight on its advertising efforts. For example, when displayed to a certain

advertiser which runs campaigns in multiple advertising platforms, the report may provide one or more

of the following exemplary insights, inter alia:", "Users who like or are interested in topic X, also usually

search for Y.", "People who bought my product P also interested in topic T. [0130] What products are

searched for by people with a social profile corresponding to some constraints, i.e. having certain

demographic characteristics.").

Claims 2 and 15:

As per claims 2 and 15, **Benis** teaches the system and method of claims 1 and 14 as described

above and further teaches wherein the computer server is programmed to:

obtain campaign delivery feed data related to a plurality of campaigns from at least one advertiser in a

preset time period (paragraphs 0108-0109 Tables 2 and 4-5); and

obtain user identifications using the campaign delivery feed data related to the plurality of campaigns

from at least one advertiser (Table 4, paragraphs 0137 and 0139).

Claims 3 and 16:

As per claims 3 and 16, **Benis** teaches the system and method of claims 2 and 15 as described above and further teaches wherein the computer server is programmed to obtain audience feed data comprising the tag information from a plurality of social networks using the user identifications, wherein the user identifications is encrypted and understandable by the computer server during the preset time period (paragraphs 0108-0109, 0137, and 0139).

Claims 4 and 17:

As per claims 4 and 17, **Benis** teaches the system and method of claims 1 and 14 as described above and further teaches wherein the computer server is programmed to:

obtain campaign delivery feed data related to a plurality of campaigns from at least one advertiser in a preset time period (paragraphs 0108-0109 Table 2-3 and 5);

obtain audience feed data including tag information from a data provider, wherein the audience feed data is segmented into one or more audience segments (paragraphs 0108-0109 Table 2-3 and 5); and

cluster the tag information to identify common properties of audience segments in the plurality of campaigns (paragraphs 0110-0112).

Claim 10:

As per claim 10, **Benis** teaches the non-transitory computer readable medium of claims 9 as

described above and further teaches configured to store processor executable instructions that, when

executed by the processor, cause the processor to:

obtain campaign delivery feed data related to a plurality of campaigns from at least one advertiser in a

preset time period, wherein the campaign delivery feed data comprises user identifications and the user

identifications are encrypted and only understandable by a preset device during the preset time period

(paragraphs 0108-0109, 0137, and 0139).

Claim 11:

As per claim 11, **Benis** teaches the non-transitory computer readable medium of claims 9 as

described above and further teaches configured to store processor executable instructions that, when

executed by the processor, cause the processor to:

cluster the tag information to identify common properties of audience segments in a plurality of

campaigns (paragraphs 0110-0112).

Claim Rejections - 35 USC § 103

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.

The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections

set forth in this Office action:

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

Claims 5, 12, and 18 are rejected under 35 U.S.C. 103 as being unpatentable over Benis et al. US

Publication 2015/0235246 A1 in view of Merryman et al. US Patent 8,671,011 B1.

Claims 5, 12, and 18:

As per claims 5, 12, and 18, **Benis** teaches the system, non-transitory computer readable

medium, and method of claims 1, 9, and 14 as described above but does not teach wherein the

computer server is programmed to detect an agency name using term frequency results from a search

engine. However, **Merryman** teaches Methods and Apparatus for Generating an Online Marketing

Campaign and further teaches, "Applicants have appreciated that, conventionally, the selection of

search engine keywords and/or categories in an online directory to use in advertising a business has

been done in an ad hoc manner. That is, someone wishing to advertise his business using a search

engine or online directory would select search engine keywords or categories in an online directory that

he or she believed would generate web site traffic and/or revenue for the business, or would hire an

advertising agency to help select search engine keywords or categories in an online directory. Whether

done by the business or an agency, the approach for selecting keywords was ad hoc." (column 3, lines 5-

15). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention

of Benis to include wherein the computer server is programmed to detect an agency name using term

frequency results from a search engine as taught by Merryman in order to determine how often the

agency name appears on the search results.

Claims 6-8 and 19-20 are rejected under 35 U.S.C. 103 as being unpatentable over Benis and

Merryman as applied to claims 5 and 18 above, and further in view of Robert et al. US Publication

2012/0265609 A1.

Claims 6 and 19:

As per claims 6 and 19, **Benis** and **Merryman** teach the system and method of claims 5 and 18 as

described above but do not teach wherein the computer server is programmed to generate a regular

expression that includes at least one of the agency name and a predefined black-list word. However,

Robert teaches an Authenticated Advertisement Platform and further teaches, "While the

aforementioned distribution scheme allows advertisements to quickly reach a wide audience, it may

also make controlling where advertisements appear very difficult. Currently, many advertisers employ

blacklists to an average list of websites that are not able to display their advertisements. In particular, an

advertiser will typically transmit (either directly, or indirectly through advertising agencies) a blacklist to

each of its associated advertising platform services. Each advertising platform service then checks the

blacklist before distributing an advertisement to a website. While website blacklists provide some

degree of control, they are not particularly effective. For example, website operators often avoid

blacklists by simply changing their Internet domains. Furthermore, because blacklists are often passed

among several entities, the actual blacklists that are used may not always be up to date. Lastly, blacklists

are not scalable and, thus, may be complicated to manage across large organizations." (paragraph

0003). Therefore, it would have been obvious to one of ordinary skill in the art at time of the invention

to modify Benis to include wherein the computer server is programmed to generate a regular expression

that includes at least one of the agency name and a predefined black-list word as taught by Robert in

order to analyze the keywords or terms when the regular expression is generated.

Claims 7 and 20:

As per claims 7 and 20, **Benis, Merryman,** and **Robert** teach the system and method of claims 6

and 19 as described above and **Benis** further teaches wherein the computer server is programmed to

detect a meaningful part in the tag information by using the regular expression to remove a non-

meaningful part in the tag information (paragraphs 0110-0112).

Claim 8:

As per claim 8, **Benis, Merryman,** and **Robert** teach the system of claim 7 as described above

and **Benis** further teaches wherein the computer server is programmed to generate the performance

report by inserting the understandable terms and the meaningful part into the report template

(paragraphs 0127-0133).

Claim 13 is rejected under 35 U.S.C. 103 as being unpatentable over Benis et al. US Publication

2015/0235246 A1 in view of Robert et al. US Publication 2012/0265609 A1.

Claim 13:

As per claim 13, **Benis** teaches the non-transitory storage medium of claim 9 as described above

and **Benis** further teaches configured to store processor executable instructions that, when executed by

the processor, cause the processor to:

Benis does not teach generate a regular expression that includes at least one of an agency name and a

predefined black-list word. However, **Robert** teaches an Authenticated Advertisement Platform and

further teaches, "While the aforementioned distribution scheme allows advertisements to quickly reach

a wide audience, it may also make controlling where advertisements appear very difficult. Currently,

many advertisers employ blacklists to an average list of websites that are not able to display their

advertisements. In particular, an advertiser will typically transmit (either directly, or indirectly through

advertising agencies) a blacklist to each of its associated advertising platform services. Each advertising

platform service then checks the blacklist before distributing an advertisement to a website. While

website blacklists provide some degree of control, they are not particularly effective. For example,

website operators often avoid blacklists by simply changing their Internet domains. Furthermore,

because blacklists are often passed among several entities, the actual blacklists that are used may not

always be up to date. Lastly, blacklists are not scalable and, thus, may be complicated to manage across

large organizations." (paragraph 0003). Therefore, it would have been obvious to one of ordinary skill in

the art at time of the invention to modify Benis to include wherein the computer server is programmed

to generate a regular expression that includes at least one of the agency name and a predefined black-

list word as taught by Robert in order to analyze the keywords or terms when the regular expression is

generated.

Benis further teaches detect a meaningful part in the clustered tag information by using the regular

expression to remove a non-meaningful part in the clustered tag information (paragraphs 0110-0112);

Benis further teaches and generate the performance report by inserting the understandable terms and

the meaningful part into the report template (paragraphs 0127-0133).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

Markman et al. US Patent 10,042,923 B2 Topic Extraction Using Clause Segmentation and High

Frequency

Law et al. US Publication 2015/0150033 A1 System and Method for Building and Tracking

Audience Segments

Knobloch US Publication 2015/0302064 A1 Tag-Based Content Exclusion

Gao et al. US Publication 2018/0060437 A1 Keyword and Business Tag Extraction

Any inquiry concerning this communication or earlier communications from the examiner

should be directed to MATTHEW L HAMILTON whose telephone number is (571)270-1837. The

examiner can normally be reached on Monday-Thursday 9:30-5:30 pm EST.

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,

Waseem Ashraf can be reached on (571)270-3948. 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 https://ppair-

my.uspto.gov/pair/PrivatePair. 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.

/MATTHEW L HAMILTON/
Primary Examiner, Art Unit 3682

REMARKS

Initially, the undersigned would like to thank the Examiner for his time in discussing this matter in an interview on 9/8/2020. Proposed claim amendments were discussed during the interview. The Examiner provided feedback and indicated that amending claims based upon the proposed claim amendments and/or the feedback would advance prosecution and require further search and consideration. At least some of the claims have been amended based upon the proposed claim amendments and/or the feedback of the Examiner. Accordingly, allowance of the pending claims is respectfully requested. An invitation to contact the undersigned is hereby extended should the same be thought to advance prosecution.

Claims 1-20 are pending in the application and are all rejected. Claims 1, 3-9, 12-14, 16 and 17 are amended herein. Reconsideration of the application in light of the following remarks is respectfully requested.

I.   CLAIM OBJECTIONS

Claims 3 and 5-8 are objected to for allegedly comprising informalities. Withdrawal of this objection is respectfully requested for at least the following reasons.

Claims 3 and 5-8, as amended, are believed to not comprise informalities. Notably, at least some amendments are made herein to advance prosecution, and are not an acknowledgment that claims 3 and 5-8, as previously presented, were objectionable.

Therefore, withdrawal of the objection is respectfully requested.

II.   REJECTION OF CLAIMS 1-20 UNDER 35 U.S.C. §101

Claims 1-20 are rejected under 35 U.S.C. §101 for allegedly being directed to non-statutory subject matter. Withdrawal of this rejection is respectfully requested for at least the following reasons.

Independent Claim 1

Amended claim 1 recites, in part:

a processor and a non-transitory storage medium accessible to the processor;
a memory storing a database; and
a computer server in communication with the memory and the database, the
computer server programmed to:
    generate a cluster group of audience feed data, the cluster group of
audience feed data comprising audience feed data from across a plurality of
audience segments sharing a common high-frequency term;
    identify understandable terms from tag information by (i) identifying noisy
terms that are not global in the cluster group of audience feed data and (ii)
removing the noisy terms from the cluster group of audience feed data, wherein
the noisy terms that are not global are understandable to one or more first
entities and not understandable to one or more second entities; and
    generate a performance report by inserting the understandable terms into
a report template.

Step 2A

As described in the ""2019 Revised Patent Subject Matter Eligibility Guidance"
released by the USPTO on January 4, 2019, "Step 2A of the 2019 Revised Patent
Subject Matter Eligibility Guidance is a two-prong inquiry."

Prong One of Step 2A

In Prong One, examiners evaluate whether the claim recites a judicial exception.
This prong is similar to procedures in prior guidance except that when determining
if a claim recites an abstract idea, examiners now refer to the subject matter
groupings of abstract ideas in Section I. (page 15 of 2019 Revised Patent Subject
Matter Eligibility Guidance)
...
In accordance with judicial precedent and in an effort to improve consistency and
predictability, the 2019 Revised Patent Subject Matter Eligibility Guidance
extracts and synthesizes key concepts identified by the courts as abstract ideas
to explain that the abstract idea exception includes the following groupings of
subject matter, when recited as such in a claim limitation(s) (that is, when recited
on their own or per se):

a) Mathematical concepts – mathematical relationships, mathematical formulas or equations, mathematical calculations;
b) Certain methods of organizing human activity – fundamental economic principles or practices (including hedging, insurance, mitigating risk); commercial or legal interactions (including agreements in the form of contracts; legal obligations; advertising, marketing or sales activities or behaviors; business relations); managing personal behavior or relationships or interactions between people (including social activities, teaching, and following rules or instructions); and
c) Mental processes – concepts performed in the human mind14 (including an observation, evaluation, judgment, opinion). (pages 9-11 of 2019 Revised Patent Subject Matter Eligibility Guidance)
...
If the claim does not recite a judicial exception (a law of nature, natural phenomenon, or subject matter within the enumerated groupings of abstract ideas in Section I), then the claim is eligible at Prong One of revised Step 2A. (page 15 of 2019 Revised Patent Subject Matter Eligibility Guidance)

The present claims provide for generate a cluster group of audience feed data, the cluster group of audience feed data comprising audience feed data from across a plurality of audience segments sharing a common high-frequency term; identify understandable terms from tag information by (i) identifying noisy terms that are not global in the cluster group of audience feed data and (ii) removing the noisy terms from the cluster group of audience feed data, wherein the noisy terms that are not global are understandable to one or more first entities and not understandable to one or more second entities; and generate a performance report by inserting the understandable terms into a report template.

The present claims do not recite a judicial exception, as they do not recite a law of nature, natural phenomenon, or subject matter within the enumerated groupings of abstract ideas in Section I of the 2019 Revised Patent Subject Matter Eligibility Guidance.

Therefore, the claims are eligible at Prong One of revised Step 2A.

Prong Two of Step 2A

> If the claim recites a judicial exception (i.e., an abstract idea enumerated in Section I of the 2019 Revised Patent Subject Matter Eligibility Guidance, a law of nature, or a natural phenomenon), the claim requires further analysis in Prong Two. (page 15 of 2019 Revised Patent Subject Matter Eligibility Guidance)
> …
> In Prong Two, examiners evaluate whether the claim recites additional elements that integrate the exception into a practical application of that exception. This prong adds a more detailed eligibility analysis to step one of the Alice/Mayo test (USPTO Step 2A) than was required under prior guidance.
>> If the recited exception is integrated into a practical application of the exception, then the claim is eligible at Prong Two of revised Step 2A. This concludes the eligibility analysis.
>> If, however, the additional elements do not integrate the exception into a practical application, then the claim is directed to the recited judicial exception, and requires further analysis under Step 2B (where it may still be eligible if it amounts to an "inventive concept"). (page 16 of 2019 Revised Patent Subject Matter Eligibility Guidance)

The present claims provide for generate a cluster group of audience feed data, the cluster group of audience feed data comprising audience feed data from across a plurality of audience segments sharing a common high-frequency term; identify understandable terms from tag information by (i) identifying noisy terms that are not global in the cluster group of audience feed data and (ii) removing the noisy terms from the cluster group of audience feed data, wherein the noisy terms that are not global are understandable to one or more first entities and not understandable to one or more second entities; and generate a performance report by inserting the understandable terms into a report template.

The present claims, even assuming *arguendo* that they recite a judicial exception, clearly integrate any alleged judicial exception into a practical application. In particular, the present claims provide for a technique that is dynamic and increases the accuracy, speed and efficiency of integrating intelligence from data providers to automatically generate human readable audience summaries.

As mentioned in the specification, "One of the <u>technical problems solved by the</u> <u>disclosure is a lack of robust and reliable method to automatically generate a human</u> <u>readable summary integrating the intelligence from all data providers</u>. Conventional campaign setup requires substantial human interaction to generate such a report. The disclosed solution <u>increases the efficiency</u> of summarizing attributes of successful campaign. Thus, the disclosed computer system may automatically generate human readable audience summaries for all successful campaigns in a timely fashion. The advertisers may take advantage of the human readable audience summaries and adjust or expand the target audiences" (e.g., [0031] of the instant application) (Emphasis added) and/or "the system solves <u>technical problems presented by managing large amounts of</u> <u>user data</u> represented by different user features collected by all types of data providers" (e.g., [0032] of the instant application) (Emphasis added).

Therefore, the claims are eligible at Prong Two of revised Step 2A.

Step 2B

Ordered Combination is Inventive and Transforms the Claim

If an abstract idea is found under the first step, a court must then "consider the elements of each claim both individually and 'as an ordered combination' to determine whether the additional elements 'transform the nature of the claim' into a patent-eligible application." (Alice, 134 S. Ct at 2355 quoting Mayo, 132 S. Ct. at 1298, 1297).

The concept of outputting data may be abstract at a high level. However, the claims recite something much narrower: a specific implementation of generate a cluster group of audience feed data, the cluster group of audience feed data comprising audience feed data from across a plurality of audience segments sharing a common high-frequency term; identify understandable terms from tag information by (i) identifying noisy terms that are not global in the cluster group of audience feed data and

(ii) removing the noisy terms from the cluster group of audience feed data, wherein the noisy terms that are not global are understandable to one or more first entities and not understandable to one or more second entities; and generate a performance report by inserting the understandable terms into a report template. Generic computers do not perform the operations as recited in the claims. (see claims for entire ordered combination). Thus the claims are "significantly more" than an abstract idea and are patent eligible under §101.

Clearly, the claims do not merely recite the allegedly abstract idea of outputting data along with the requirement to perform it on a computer. Many additional elements are recited, in a non-conventional arrangement. Thus, the inventive concept can be found in the ordered combination of claim limitations that transform the allegedly abstract idea of outputting data into a particular, practical application of that allegedly abstract idea, which is a patent eligible application.

Accordingly, claim 1 recites significantly more than the alleged abstract idea. Thus, claim 1 patent eligible under Step 2B of *Alice*, and the rejection should be withdrawn.

Accordingly, claim 1 is believed to overcome the 101 rejection.

Claims 9 and 14 are believed to comprise at least some similar features, and are thus believed to overcome the 101 rejection as well.

Therefore, withdrawal of the rejection is respectfully requested.

III. **REJECTION OF CLAIM 16 UNDER 35 U.S.C. §112(b)**

Claim 16 is rejected under 35 U.S.C. § 112(b), second paragraph as allegedly being indefinite for failing to particularly point out the claimed subject matter. Withdrawal of this rejection is respectfully requested for at least the following reasons.

Claim 16, as amended, is believed to be definite. Notably, at least some amendments are made herein to advance prosecution, and are not an acknowledgment that claim 16, as previously presented, failed to particularly point out the claimed subject matter.

Therefore, withdrawal of the rejection is respectfully requested.

IV. **REJECTION OF CLAIMS 1-4, 9-11 AND 14-17 UNDER 35 U.S.C. § 102(a)**

Claims 1-4, 9-11 and 14-17 are rejected under 35 U.S.C. § 102(a) as allegedly being anticipated by Benis, U.S. Publication No. 2015/0235246 (*hereinafter* "Benis"). Withdrawal of this rejection is respectfully requested for at least the following reasons.

In the interview on 9/8/2020, proposed claim amendments were discussed and the Examiner provided feedback and indicated that amending claims based upon the proposed claim amendments and/or the feedback would advance prosecution and require further search and consideration. Independent claims 1, 9 and/or 14 are amended based upon the proposed claim amendments and/or the feedback of the Examiner and are therefore believed to overcome the rejection. At least some support may be found in [0041] and/or [0052] of the instant application.

Therefore, withdrawal of the rejection and allowance of the pending claims is respectfully requested.

V. **REJECTION OF CLAIMS 5, 12 AND 18 UNDER 35 U.S.C. § 103**

Claims 5, 12 and 18 are rejected under 35 U.S.C. § 103 as allegedly being unpatentable over Benis in view of Merryman, U.S. Patent No. 8,671,011 (*hereinafter* "Merryman"). Withdrawal of this rejection is respectfully requested for at least the following reasons.

Claims 5, 12 and 18 depend from independent claims 1, 9 or 14, which are believed to be allowable over Benis for at least the foregoing reasons. It is believed that Merryman does not make up for at least the aforementioned deficiencies of Benis with regard to independent claims 1, 9 and 14. Independent claims 1, 9 and 14 are therefore believed to be allowable over the suggested combination, and claims 5, 12 and 18 are believed to be allowable as well at least because they depend from independent claims 1, 9 or 14.

Therefore, withdrawal of the rejection and allowance of the pending claims is respectfully requested.

VI.   REJECTION OF CLAIMS 6-8 AND 19-20 UNDER 35 U.S.C. § 103

Claims 6-8 and 19-20 are rejected under 35 U.S.C. § 103 as allegedly being unpatentable over Benis in view of Merryman and in further view of Robert, U.S. Publication No. 2012/0265609 (*hereinafter* "Robert"). Withdrawal of this rejection is respectfully requested for at least the following reasons.

Claims 6-8 and 19-20 depend from independent claims 1 or 14, which are believed to be allowable over Benis for at least the foregoing reasons. It is believed that Merryman and Robert do not make up for at least the aforementioned deficiencies of Benis with regard to independent claims 1 and 14. Independent claims 1 and 14 are therefore believed to be allowable over the suggested combination, and claims 6-8 and 19-20 are believed to be allowable as well at least because they depend from independent claims 1 or 14.

Therefore, withdrawal of the rejection and allowance of the pending claims is respectfully requested.

VII.   REJECTION OF CLAIM 13 UNDER 35 U.S.C. § 103(a)

Claim 13 is rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Benis in view of Robert. Withdrawal of this rejection is respectfully requested for at least the following reasons.

Dependent claim 13 depends from independent claim 9, which is believed to be allowable over Benis for at least the foregoing reasons. It is believed that Robert fails to make up for the deficiencies of Benis with regard to independent claim 9. Independent claim 9 is thus believed to be allowable over the suggested combination, and claim 13 is thus likewise believed to be allowable over the suggested combination at least because it depends from independent claim 9.

Therefore, withdrawal of the rejection and allowance of the pending claim is respectfully requested.

VIII. CONCLUSION

For at least the above reasons, the claims currently under consideration are believed to be in condition for allowance. It is to be appreciated that while reference may be made back to certain parts of the application in this Reply (e.g., page numbers, line numbers, Figs., etc.), that such referencing is not to be interpreted in a limiting manner (e.g., to limit the scope of the claims and/or features therein to the particular portion(s) referenced), but is instead merely done for purposes of explanation, illustration and/or ease of understanding, for example. Additionally, at least one of A and B and/or the like generally comprises A or B and/or both A and B. Also, first, second, third, etc. are generally merely used as names, designators, etc. and are not necessarily meant to imply an ordering, temporal relation, etc. Although the present communication may include alterations to the application or claims, or characterizations of claim scope or referenced art, the Applicant is not conceding that previously pending claims are not patentable over the cited references. Rather, any alterations or characterizations are being made to facilitate expeditious prosecution of this application. Applicant reserves the right to pursue at a later date any previously pending or other broader or narrower claims that capture any subject matter supported by the present disclosure, including subject matter found to be specifically disclaimed herein or by any prior prosecution. Accordingly, reviewers of this or any parent, child, or related prosecution history shall not reasonably infer that the Applicant has made any disclaimers or disavowals of any subject matter supported by the present application.

Should the Examiner feel that a telephone interview would be helpful to facilitate favorable prosecution of the above-identified application, the Examiner is invited to contact the undersigned at the telephone number provided below.

Should any fees be due as a result of the filing of this response, the Commissioner is hereby authorized to charge the Deposit Account Number 50-5088, **YAP456USA**.

Respectfully submitted,
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AMENDMENTS

IN THE CLAIMS:

Please amend claims 1, 3-9, 12-14, 16 and 17 as follows:

1.   (Currently Amended) A system comprising:

a processor and a non-transitory storage medium accessible to the processor;

a memory storing a database; and

a computer server in communication with the memory and the database, the computer server programmed to:

generate a cluster group of audience feed data, the cluster group of audience feed data comprising audience feed data from across a plurality of audience segments sharing a common high-frequency term;

identify understandable terms from tag information by (i) identifying noisy terms that are not global in the cluster group of audience feed data and (ii) removing the noisy terms from the cluster group of audience feed data, wherein the noisy terms that are not global are understandable to one or more first entities and not understandable to one or more second entities; and

generate a performance report by inserting the understandable terms into a report template.

2.   (Original) The system of claim 1, wherein the computer server is programmed to:

obtain campaign delivery feed data related to a plurality of campaigns from at least one advertiser in a preset time period; and

obtain user identifications using the campaign delivery feed data related to the plurality of campaigns from at least one advertiser.

3.   (Currently Amended) The system of claim 2, wherein the computer server is programmed to:

obtain audience feed data comprising the tag information from a plurality of social networks using the user identifications, wherein the user identifications [[is]] are encrypted and understandable by the computer server during the preset time period.

4.   (Currently Amended) The system of claim 1, wherein the computer server is programmed to:

obtain campaign delivery feed data related to a plurality of campaigns from at least one advertiser in a preset time period;

obtain audience feed data including second tag information from a data provider, wherein the audience feed data including the second tag information is segmented into one or more audience segments; and

cluster the second tag information to identify common properties of audience segments in the plurality of campaigns.

5.   (Currently Amended) The system of claim 1, wherein the computer server is programmed to:

detect an agency name using term frequency results from a search engine.

6.   (Currently Amended) The system of claim 5, wherein the computer server is programmed to:

generate a regular expression that includes at least one of the agency name and a predefined black-list word.

7.   (Currently Amended) The system of claim 6, wherein the computer server is programmed to:

detect a meaningful part in the tag information by using the regular expression to remove a non-meaningful part in the tag information.

8.   (Currently Amended) The system of claim [[7]] 1, wherein the computer server is programmed to:

adjust one or more target audiences based upon ~~generate~~ the performance report ~~by inserting the understandable terms and the meaningful part into the report template~~.

9.   (Currently Amended) A non-transitory storage medium configured to store processor executable instructions that, when executed by a processor, cause the processor to:

generate a cluster group of audience feed data, the cluster group of audience feed data comprising audience feed data from across a plurality of audience segments sharing a common high-frequency term;

identify understandable terms from tag information by (i) identifying noisy terms that are not global in the cluster group of audience feed data and (ii) removing the noisy terms from the cluster group of audience feed data; and

generate a performance report by inserting the understandable terms into a report template.

10.   (Original) The non-transitory storage medium of claim 9, configured to store processor executable instructions that, when executed by the processor, cause the processor to:

obtain campaign delivery feed data related to a plurality of campaigns from at least one advertiser in a preset time period, wherein the campaign delivery feed data comprises user identifications and the user identifications are encrypted and only understandable by a preset device during the preset time period.

11. (Original) The non-transitory storage medium of claim 9, configured to store processor executable instructions that, when executed by the processor, cause the processor to:

cluster the tag information to identify common properties of audience segments in a plurality of campaigns.

12. (Currently Amended) The non-transitory storage medium of claim 9, ~~further~~ configured to store processor executable instructions that, when executed by the processor, cause the processor to:

detect an agency name using term frequency results from a search engine.

13. (Currently Amended) The non-transitory storage medium of claim 9, configured to store processor executable instructions that, when executed by the processor, cause the processor to:

generate a regular expression that includes at least one of an agency name and a predefined black-list word;

detect a meaningful part in the ~~clustered~~ tag information by using the regular expression to remove a non-meaningful part in the ~~clustered~~ tag information; and

generate the performance report by inserting the understandable terms and the meaningful part into the report template.

14. (Currently Amended) A method comprising:

generating a cluster group of audience feed data, the cluster group <u>of audience feed data</u> comprising audience feed data from across a plurality of audience segments sharing a common high-frequency term;

identifying understandable terms from tag information by (i) identifying noisy terms that are not global in the cluster group of audience feed data and (ii) removing the noisy terms from the cluster group of audience feed data; and

generating a performance report by inserting the understandable terms into a report template.

15.   (Original) The method of claim 14, comprising:

obtaining campaign delivery feed data related to a plurality of campaigns from at least one advertiser in a preset time period; and

obtaining user identifications using the campaign delivery feed data related to the plurality of campaigns from at least one advertiser.

16.   (Currently Amended) The method of claim 15, comprising:

obtaining audience feed data comprising the tag information from a plurality of social networks using the user identifications, wherein the user identifications [[is]] are encrypted and understandable by a the computer server during the preset time period.

17.   (Currently Amended) The method of claim 14, comprising:

obtaining campaign delivery feed data related to a plurality of campaigns from at least one advertiser in a preset time period;

obtaining audience feed data including second tag information from a data provider, wherein the audience feed data including the second tag information is segmented into one or more audience segments; and

clustering the second tag information to identify common properties of audience segments in the plurality of campaigns.

18.   (Original) The method of claim 14, comprising detecting an agency name using term frequency results from a search engine.

19. (Original) The method of claim 18, comprising generating a regular expression that includes at least one of the agency name and a predefined black-list word.

20. (Original) The method of claim 19, comprising detecting a meaningful part in the tag information by using the regular expression to remove a non-meaningful part in the tag information.