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VIA IPA e-Services

IP Australia
Attention: The Commissioner of Patents
PO Box 200
WODEN ACT 5071

SIR

AUSTRALIAN PATENT APPLICATION No. 2019253767
In the name of: **ACCENTURE GLOBAL SERVICES LIMITED**
Title: **SYSTEM ARCHITECTURE FOR CUSTOMER GENOME CONSTRUCTION AND ANALYSIS**
Our Ref: **31972AU3-NWM/BR**

We refer to the Examiner's Second Report in respect of the above application and enclose the following documents:

- Third Statement of Proposed Amendments;
- Replacement pages; and
- Marked pages detailing the nature and location of the proposed amendments.

PROPOSED AMENDMENTS

As outlined in the enclosed Statement of Proposed Amendments:

- Pending independent claims 1, and 9 (now renumbered 1 and 8) have amendments proposed; and
- Former claims 3 and 11 are deleted.

The amendments do not add new matter, and support for these amendments can be found in the specification and claims of the present application as originally filed.

As a result of the amendments, there are 14 pending claims of which claims 1 and 8 (as amended) are independent claims.

PATENTABLE SUBJECT MATTER

The Examiner contends that former claims 1 to 16 do not define a manner of manufacture within the meaning of Section 18(1)(a) of the Patents Act 1990, since the substance of the invention relates to a marketing scheme that involves standard data processing and computer implementation.

The Examiner further contends that the invention attempts to solve the problem of personalised customer intelligence and further asserts that this is not a problem of a technical nature.

The Applicant respectfully disagrees and submits that the Examiner has mischaracterised the substance of the claimed invention by failing to afford proper weight to the technical features recited in the claims and has also mischaracterised the problem that the present claims seek to address.

In this regard, the Applicant submits that the substance of the claimed invention resides in how, with the application of various technical features, customer information is captured, processed and combined to provide a ***dynamic and less biased "***customer genome" which is subsequently used to cause a recipient mobile device to display recipient-specific custom metadata.

The Applicant further submits that the present claims seek to provide a technical solution to the problem regarding how to capture customer information in real-time to enable a customer genome to be updated dynamically.

Regarding the present claims (whether before or after amendment as proposed herein), it is clear that they involve significant analysis and data processing to generate a recipient profile that results in a "customer genome". The data analysis involves analysing a selected portion of received data to determine one or more attributes of the recipient where the received data further includes transactional data and product data including different data attributes and where analysing the selected portion of the received data includes, combining product data and transaction data to form a data space, calculating a term frequency score for each product attribute, calculating an inverse document frequency for each product attribute and combining the term frequency and inverse document frequency to form one or more attributes of the recipient.

Furthermore, the step of collecting data (as claimed) involves at least receiving data from a variety of data channels, where the received data include batch data and stream data. Furthermore, the data collection involves monitoring the plurality of data channels for

additional data including real-time location information originated by a mobile device associated with the recipient identifier of the recipient and flagging, by the processor, the additional data in response to determination that the mobile device is stationary for a predetermined threshold time.

Although the Applicant disagrees with the Examiner's characterisation of the substance of the present claims and the problem the present claims seek to address, the present claims are further proposed to be amended to include the additional technical feature of *updating the recipient profile periodically, on-demand, in response to a trigger, or any combination thereof*, which further assists in generating a less biased, more comprehensive, customer genome dynamically. Independent claim 8 has also been similarly amended.

In this regard, the Applicant refers the Examiner to, for example, paragraph [041] of the present specification in which it is stated:

> ***In some implementations, the CEP system 114 may parse incoming streaming data 104 to detect specific items that may warrant an immediate change in a customer genome*** *or provisioning of a particular offer. For example, the CEP system 114 in processing streaming location data may recognize that a customer has entered a 14 particular geographic location or business location,* ***which may trigger a change in the customer genome*** *or cause an offer to be extended to the customer. In a more complex scenario, the CEP system 114 may process streaming location data to track a customer as they move around a store, and may be able to better understand how the customer is moving. For example, the CEP system 114, in processing location data, may determine that the customer walked through a certain path (e.g., from the entrance to aisle five, then through aisle eight) and stopped at a particular location (e.g., ultimately arriving at the frozen foods section). In order to avoid inundating the customer with offers, which could alienate the customer, the CEP system 114* ***may only trigger a response when the customer stops, or is stationary, for a specified period of time****. In some cases, the CEP system 114 can create or update a genome on its own. In some cases, the real-time processing capabilities of the CEP system 114 may be reserved for priority updates and customer genome creation.*
>
> [Emphasis added]

The Applicant also submits that it was not known (or expected), at the relevant priority date, that the combination of technical features recited in the present claims would yield at least the practical and useful result of the ability to generate and dynamically update an unbiased customer genome.

The Applicant also refers the Examiner the decision in *Commissioner of Patents v RPL Central Pty Ltd [2015] FCAFC 177 (RPL2)* in which the Full Court stated at paragraph 100:

> *Relevantly, the Full Court in Research Affiliates said (at [94]) that the* ***distinction to be drawn was between the employment of an abstract idea or law of nature and the idea or law itself*** *and that there is a distinction between a technological innovation which is patentable and a business innovation which is not. Their Honours repeated an observation from Grant (at [29]) '[a] product of a method is something in which a new and useful effect may be observed. For claimed computer programs, the courts looked to the application of the program to produce a practical and useful result, so that more than "intellectual information" was involved.' A technological innovation is patentable; a business innovation is not, although a business method may be the subject of letters patent. However, '[a]* ***method that is in the nature of directions for use does not constitute an invention or a manner of manufacture in the absence of some previously unrecognised property of an aspect of the method****' (Research Affiliates at [95]).*
>
> [Emphasis added]

Their Honours further stated in paragraph 105 of RPL2 that:

> *Care must be taken to consider the circumstances of the claimed invention, beyond the form of words used. In both IBM 2 and CCOM, the invention as claimed was patentable. However, the method in IBM 2 could have been characterised simply to involve "drawing a curve on a computer'; in CCOM, the claimed invention could have been characterised as "to convert a word into Chinese characters".*

According to the guidance of the Full Court in RPL2, care must be taken not to mischaracterise an invention as a mere scheme.

The Applicant further refers the Examiner to paragraph 109 of RPL2 in which the Full Court stated regarding the claimed RPL invention:

> Turning to the characterisation of the invention of the Patent Application, the key aspect relied upon by RPL Central is the conversion of personalised information into questions, including asking for relevant attachments. The Commissioner says that this is simply an easily programmed conversion of information to a question by prepending relevant words. ***The computer is, in effect, operating as an intermediary in the user's quest for an evaluation of his or her competency for a particular course and entitlement to obtain a qualification without participating in that course. However, the computer does not evaluate the user's input to provide the answer.***

> ***It is not functioning in the nature of an adviser or an artificial intelligence.*** Rather, the programming allows for a series of prepared words to be prepended to the user information, to turn the statement into a question.
>
> [Emphasis added]

In contrast to the claims considered in RPL2, since the present invention (as claimed) involves a number of technical features that, in combination, yield at least the practical and useful effect of ***generation of a dynamic genome***, the substance of the claimed invention does not reside in the mere presentation of information.

The Examiner further asserts that the *"customer genome" is merely integrated information regarding customer interactions… It merely involves standard data processing and does not have any technical connotations*. However, the Applicant respectfully submits that the question regarding whether or not standard processing operations are used to generate the customer genome is not a valid consideration when assessing the substance of the present invention (as claimed). Instead, as per the decision in RPL2, the relevant question is whether the implementation of various technical features (in combination) to generate a dynamic customer genome *involves sufficient inventive concept such that the computer is considered "improved".*

This above reasoning should not be foreign to the Examiner since the Commissioner has previously confirmed that even though a claimed invention involves the implementation of an abstract idea solely on a generic computer, the claimed invention may comprise patentable subject matter provided the abstract idea involves "sufficient inventive concept" such that the computer is considered "improved". In this regard, the Applicant respectfully refers the Examiner to paragraph 85 of RPL2 in which the Full Court provided an outline of the Commissioners submission regarding the claimed invention considered by the Full Federal Court of Australia in *CCOM Pty Ltd v Jiejing Pty Ltd* (1994) 51 FCR 260 (CCOM):

> *The Commissioner distinguished CCOM and International Business Machines Corporation v Commissioner of Patents (1991) 33 FCR 218 (IBM 2),* ***as the difference between the implementation of an abstract idea in the computer and the implementation of an abstract idea in the computer to create the improvement in the computer****; that is, there needed to be sufficient 'inventive concept' to transform an unpatentable abstract idea (or scheme) into a patent eligible application (cf. the US Supreme Court reasoning in Alice Corporation). Further, the Commissioner points out, the speed and power of modern computers make them a fast and efficient tool for businesses and few business processes are performed without the use of a computer. In this way, computers can be said to be essential and integral to, and inextricably*

linked with, the majority of new business methods. She submits that this alone cannot be sufficient to make otherwise unpatentable business methods proper subject matter.

[Emphasis added].

The Applicant also respectfully refers the Examiner to Section 2.9.2.7 of the Manual of Practice and Procedure which states, with reference to the CCOM decision:

The described apparatus in a broad sense consisted of conventional computer equipment including a database, a visual display and a keyboard. Generally, CCOM claimed an interface with a database that contained a data structure of Chinese language characters which encoded strokes by stroke type and in an order in which the strokes are written (if writing by hand). The claim also defined software that presented the strokes on the display for the user. The interface also provided a retrieval program and graphic representation of each character that enabled the user to select the character using the keyboard. The overall outcome was an efficient way of retrieving Chinese characters. Cooper J found that:

> "The NRDC Case (102 CLR at 275-277) requires a mode or manner of achieving an end result which is an artificially created state of affairs of utility in the field of economic endeavour. In the present case, a relevant field of economic endeavour is the use of word processing to assemble text in Chinese language characters. The end result achieved is the retrieval of graphic representations of desired characters, for assembly of text. The mode or manner of obtaining this, which provides particular utility in achieving the end result, is the storage of data as to Chinese characters analysed by stroke-type categories, for search including 'flagging' (and 'unflagging') and selection by reference thereto."

While the decision did not say it, ***an improved data structure that facilities (sic) the <u>easier or improved finding</u> of items in a computer implemented searching device has a material advantage. It is not business administration, nor merely information****.*

This decision makes it apparent that software related inventions can be patentable in Australia.

[Emphasis added]

In view of the Commissioner's submissions in respect of CCOM as referenced in the RPL2 decision, and also the discussion of the CCOM decision in Section 2.9.2.7 of the Manual of Practice and Procedure, it is clear that provided the implementation of an abstract data structure on a generic computer results in a material advantage, then the claimed invention should be considered directed to patent-eligible subject matter. Accordingly, the Examiner's assertion in the Report "*Furthermore, as per RPL, the mere use of [a] generic computer with generic software to carry out an abstract/business idea does not render the claims patentable, nor provide an artificially created state of affairs of the type suggested to patentable in the context of NRDC*" appears to be a mischaracterization of the conclusions of the Full Court in RPL2.

Moreover, at least on the basis of the CCOM decision, the present claims solely involving generic computing implementation cannot be a determinative consideration in isolation of other factors when assessing whether the substance of the claimed invention relates to patent-eligible subject matter. In the event the claims defining an invention arguably comprise the implementation of a scheme on a generic computer, this is not sufficient to arrive at a conclusion that the substance of the claimed invention resides solely in the non-patentable scheme. Such a conclusion can only be regarded as valid if the claims relate solely to "*intellectual information*" or the claims relate to a method "*that is in the nature of directions for use*".

For reasons presented herein, the presently claimed invention (as amended), defines more than "intellectual information" or more than a method that is merely "in the nature of directions for use".

In the event the Examiner intends to distinguish the relevance of the CCOM decision to the present claims on the basis that the present claims, do not result in an "improved computer", the Examiner is respectfully requested to provide detailed reasoning why the data structure of CCOM (which is essentially abstract information as acknowledged by the Commissioner in her submissions regarding CCOM in paragraph 85 of RPL2), should be considered to provide a material advantage yet the present claims can reasonably be considered to define nothing other than intellectual information.

In this regard, it is important to highlight that the material advantage of the CCOM claims relates to the "**easier or improved"** finding of Chinese language characters (refer discussion of CCOM in Section 2.9.2.7 of the Manual of Practice and Procedure) to thereby provide more efficient Chinese language processing using a generic computing device. In other words, the ability to process Chinese language characters on a generic computing device was known at

the relevant priority date of the CCOM claims, and the claimed CCOM invention provided a more efficient means of finding a required Chinese language character which, according, the Manual of Practice and Procedure in Section 2.9.2.7, is regarded as “a material advantage”.

As the Case Examiner and the Supervising Examiner will appreciate, Applicants and their professional advisors are primarily guided by the Examiner’s Manual and the decisions of Hearing Officers (such as those recently issued in respect of EBAY, JAGWOOD, APPLE and more recently Advanced New Technologies) to guide them regarding their decisions when filing and prosecuting patent applications for inventions. Any failure by Examiners of the Patent Office to carefully observe the guidance published in the Examiner’s Manual has the potential to mislead Applicants and their advisors regarding the Examination of their applications.

Accordingly, we urge the Examiner to carefully apply the published guidance in the Examiner’s Manual and in the event further objection is considered warranted, the Examiner is requested to provide clear and logically consistent reasoning with an explanation regarding why the reasoning enclosed herein in support of the claims comprising a Manner of Manufacture is errant or misguided. Particular consideration of claims 5 and 12 (as amended) is requested in view of the additional technical limitations in these claims.

Withdrawal of the objection to the claims for lack of patentable subject matter is respectfully requested.

Yours respectfully

Murray Trento & Associates Pty Ltd

N. W. Murray

NEIL MURRAY

AUSTRALIA

Patents Act 1990

IN THE MATTER of Patent Application No. **2019253767** in the name of Accenture Global Services Limited

STATEMENT OF PROPOSED AMENDMENTS (No. 3) UNDER SECTION 104

5. Please delete current description pages 2-4 on file and replace with new description pages 2-4 enclosed herewith, together with a marked copy.

6. Please delete current claim pages 42-48 on file and replace with new claim pages 42-48 enclosed herewith, together with a marked copy.

DATED: 5 October 2021

Accenture Global Services Limited
by its Patent Attorneys
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TO: THE COMMISSIONER OF PATENTS; AUSTRALIA