

Citation: Safeway, Inc (Re), 2024 CACP 7

Commissioner's Decision #1666

Décision du commissaire n° 1666

Date: 2024-04-26

TOPIC: B00 Ambiguity or Indefiniteness (incomplete)
J00 Meaning of Art
O00 Obviousness

SUJET : B00 Caractère ambigu ou indéfini (incomplet)
J00 Signification de la technique
O00 Évidence

Application No. 2620462

Demande n° 2 620 462

IN THE CANADIAN PATENT OFFICE

DECISION OF THE COMMISSIONER OF PATENTS

Patent application number 2,620,462, having been rejected under subsection 30(3) of the *Patent Rules* (SOR/96–423) (“former *Rules*”), has subsequently been reviewed in accordance with paragraph 199(3)(c) of the *Patent Rules* (SOR/2019–251) (“*Patent Rules*”). The recommendation of the Patent Appeal Board and the decision of the Commissioner are to refuse the application.

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INTRODUCTION

- [1] This recommendation concerns the review of rejected patent application number 2,620,462, which is entitled “NUTRITION MANAGEMENT AND MEAL PLANNING PROGRAM” and is owned by SAFEWAY, INC. The Patent Appeal Board (“the Board”) reviewed the rejected application pursuant to paragraph 199(3)(c) of the *Patent Rules*. As explained below, the Board’s recommendation is that the Commissioner of Patents refuse the application.

BACKGROUND

The application

- [2] Canadian patent application 2,620,462 was filed on February 7, 2008, and has been open to public inspection since November 16, 2008.
- [3] The instant application relates to a method for nutritional planning. More specifically, the nutritional planning method comprises the steps of comparing the quantity of nutritional elements present in products purchased using a loyalty profile aggregated over a time range with standardized intake guidelines, identifying deficiencies of certain nutritional elements, and creating and adjusting a meal plan to compensate for the identified deficiencies.

Prosecution history

- [4] On September 11, 2019, a Final Action (“FA”) was issued pursuant to subsection 30(3) of the former *Rules*. The FA indicated the application to be defective on the grounds that claims 1 to 21 are directed to subject-matter that lies outside the definition of “invention” and do not comply with section 2 of the *Patent Act*, and that claims 1 to 21 would have been obvious and do not comply with section 28.3 of the *Patent Act*.

- [5] On March 11, 2020, a response to the FA (“R-FA”) was filed by the Applicant. The R-FA did not provide amendments to the instant application, and submitted further arguments in favour of the patentability of the claims on file.
- [6] Since the subject-matter analysis in the FA was based on an outdated Office Practice, the Examiner reassessed the claimed subject-matter under the updated Office Practice in accordance with “Patentable Subject-Matter under the *Patent Act*” (CIPO, November 2020) [PN2020–04] in a Summary of Reasons (“SOR”). As a result, the SOR concluded that the application continued to include non-patentable subject-matter and obviousness defects. Consequently, on July 28, 2021, the application was forwarded to the Board for review on behalf of the Commissioner of Patents.
- [7] On July 30, 2021, the Board forwarded a copy of the SOR to the Applicant and requested that the Applicant confirm their continued interest in having the application reviewed. In a response to the SOR dated August 19, 2021, the Applicant confirmed their continued interest in having the application reviewed.
- [8] In a preliminary review letter dated December 21, 2023 (“PR letter”), the undersigned Panel (“the Panel”) presented its preliminary analysis and rationale, including a notification under 86(9) of the *Patent Rules* and identification of further defects:
- Claims 1 to 21 are directed to non-patentable subject-matter and do not comply with section 2 and subsection 27(8) of the *Patent Act*;
 - Claims 1 to 21 would not have been obvious and do comply with section 28.3 of the *Patent Act*; and
 - Claims 7 and 20 are indefinite and do not comply with subsection 27(4) of the *Patent Act*.
- [9] The PR letter also offered the Applicant the opportunities to make written submissions and attend an oral hearing.

- [10] In a letter dated January 23, 2024, the Applicant indicated that they intended to abandon the instant application.
- [11] No further submission has been received.
- [12] Since the application is not withdrawn, we undertake the final review based on the written record.

THE ISSUES

- [13] In summary, this review considers the following issues:
- Whether claims 1 to 21 are directed to patentable subject-matter and comply with section 2 and subsection 27(8) of the *Patent Act*;
 - Whether claims 1 to 21 on file are unobvious, as required by section 28.3 of the *Patent Act*; and
 - Whether claims 7 and 20 are definite, as required by subsection 27(4) of the *Patent Act*.

PURPOSIVE CONSTRUCTION

Legal Principles

- [14] Purposive Construction is antecedent to any consideration of validity (*Free World Trust v Électro Santé Inc*, 2000 SCC 66 at para 19 [*Free World Trust*]).
- [15] In accordance with *Free World Trust* and *Whirlpool Corp v Camco Inc*, 2000 SCC 67, purposive construction is performed from the point of view of the person skilled in the art in light of the relevant common general knowledge (“CGK”), considering the whole of the disclosure including the specification and drawings. In addition to interpreting the meaning of the terms of a claim, purposive construction distinguishes the essential

elements of the claim from the non-essential elements. Whether an element is essential depends on the intent expressed in or inferred from the claim, and on whether it would have been obvious to the skilled person that a variant has a material effect upon the way the invention works.

- [16] *PN2020–04* notes that all elements in a claim are presumed essential unless such presumption is contrary to the claim language, or it is established otherwise (see also *Free World Trust* at para 57, *Distrimedic Inc v Dispill Inc*, 2013 FC 1043 at para 201).

Analysis

The person skilled in the art and their relevant CGK

- [17] The PR letter adopted the identifications of the skilled person and their CGK from the FA:

Identify the person skilled in the art

The person skilled in the art is considered to be an individual or a team comprising one or more dieticians, computer scientists and IT professionals who have relevant education and experience in designing, programming and implementing a computerized system for managing nutritional planning data.

Identify the relevant common general knowledge of that person

- software application development related to managing profiles that contain food products purchase history
- familiar with nutritional intake guidelines and recommended daily allowance

- analyzing meal plans and recipes to identify nutritional deficiencies and providing food choices to compensate the identified deficiencies
- general database knowledge such as querying, updating, storing and retrieving data

[18] In the absence of further submissions from the Applicant, we adopt the above characterizations of the person skilled in the art and the relevant CGK.

The essential elements

[19] There are 21 claims in the claims on file, including independent claims 1, 7, and 12, and dependent claims 2 to 6, 8 to 11, and 13 to 21.

[20] Claim 1 is representative of the independent claims and reads:

1. A method for nutritional planning, executed by a computer having a processor, the method comprising:

storing, by the processor, in a database coupled to a central terminal, a plurality of records comprising nutritional information related to products available for purchase using a loyalty profile which is associated with a consumer, wherein the nutritional information comprises a nutritional element of the products available for purchase;

receiving, by the computer from a point-of-sale device, a notification of products purchased using a loyalty card associated with the loyalty profile;

upon receiving the notification, associating, by the processor, in the database, the nutritional information related to products available for purchase using the loyalty profile with the products

purchased by the consumer using the loyalty card associated with the loyalty profile, wherein the nutritional information relating to the products purchased comprises a quantity of the nutritional element present in each of the products purchased;

aggregating, by the processor, the quantity of the nutritional element present in the products purchased using the loyalty profile over a historical time range;

comparing, by the processor, the quantity of the nutritional element present in the products purchased using the loyalty profile aggregated over the historical time range with standardized intake guidelines;

identifying, by the processor, a first deficiency for the quantity of the nutritional element present in the products purchased using the loyalty profile based on the step of comparing, wherein the first deficiency is an inadequate amount of the nutritional element;

creating, by the processor, a meal plan which compensates for the first deficiency;

identifying, by the processor, a second deficiency for a quantity of another nutritional element present in the meal plan, wherein the second deficiency is an inadequate amount of the other nutritional element;

matching, by the processor, the meal plan with one or more recipes containing ingredients that compensate for the second deficiency;

verifying, by the processor, the matching of the meal plan with the one or more recipes does not exceed the standardized intake guidelines; and

transmitting, by the processor, the meal plan matched with the one or more recipes that compensate for the second deficiency for display on a consumer computer via a network connection.

- [21] Independent claims 7 and 12 recite a computer-readable medium encoded with a computer program code causing a computer to execute the method steps for managing nutritional planning data, and a system comprising components that are configured to execute the method steps for managing nutritional planning data, respectively. The dependent claims define further limitations regarding the nutritional planning method.
- [22] As explained in the PR letter, according to *PN2020-04*, in “carrying out this identification of essential and non-essential elements, all elements set out in a claim are presumed essential, unless it is established otherwise or is contrary to the language used in the claim.” Considering the whole of the specification, we consider that the skilled person would understand that there is no use of language in the claims indicating that any of the elements are optional or otherwise non-essential. Therefore, we presume that all claimed elements are essential.

PATENTABLE SUBJECT-MATTER

Legal Principles

- [23] Any patentable invention must fall within the definition set out in section 2 of the *Patent Act*, including falling within one of the categories defined therein:

“***invention***” means any new and useful art, process, machine, manufacture or composition of matter, or any new and useful improvement in any art, process, machine, manufacture or composition of matter.

- [24] Subsection 27(8) of the *Patent Act* also prescribes that:

No patent shall be granted for any mere scientific principle or abstract theorem.

- [25] *PN2020–04* describes the Patent Office’s approach to determining if a claim is patentable subject-matter:

To be both patentable subject-matter and not be prohibited under subsection 27(8) of the *Patent Act*, the subject-matter defined by a claim must be limited to or narrower than an actual invention that either has physical existence or manifests a discernible physical effect or change and that relates to the manual or productive arts, meaning those arts involving or concerned with applied and industrial sciences as distinguished in particular from the fine arts or works of art that are inventive only in an artistic or aesthetic sense.

- [26] The determination of the actual invention is a relevant and necessary question in assessing patentable subject-matter (*Canada (Attorney General) v Amazon.com Inc*, 2011 FCA 328 at para 42 [*Amazon*]). As stated by the Federal Court of Appeal in *Canada (Attorney General) v Benjamin Moore & Co*, 2023 FCA 168 at para 68 [*Benjamin Moore*], this determination is in line with that Court’s statement in *Schlumberger Canada Ltd v Commissioner of Patents*, [1982] 1 FC 845 (CA) [*Schlumberger*] that a patentable subject-matter assessment involves determining what according to the application has been discovered. The actual invention is identified in the context of the new discovery or knowledge and must ultimately satisfy the “physicality requirement” that is implicit in the definition of “invention” (*Amazon* at paras 65 and 66).
- [27] *Amazon* at para 44 tells us that “a patent claim may be expressed in language that is deliberately or inadvertently deceptive” and that what appears on its face to be an “art” or “process” may in fact be a claim to an unpatentable mathematical formula, as was the case in *Schlumberger*.
- [28] This sentiment is expressed in the position of the *Amazon* Court that the presence of a practical application may not, in some cases, be sufficient to satisfy the physicality requirement, which requires something with physical

existence, or something that manifests a discernible effect or change (*Amazon* at paras 66 and 69). To illustrate this point, *Amazon* referred to *Schlumberger*, where the claims “were not saved by the fact that they contemplated the use of a physical tool, a computer, to give the novel mathematical formula a practical application” (*Amazon* at para 69).

- [29] The patentable subject-matter concerns regarding the well-known use of a computer to process an algorithm, illustrated by *Schlumberger*, are expressed in the factors set out in *PN2020-04* that may be considered when reviewing computer-implemented inventions, namely:
- the mere fact that a computer is among the essential elements of the claimed invention does not necessarily mean that the claimed invention is patentable subject-matter;
 - an algorithm itself is abstract, unpatentable subject-matter and prohibited by subsection 27(8) of the *Patent Act*;
 - a computer programmed to merely process an abstract algorithm in a well-known manner without more will not make it patentable subject-matter; and
 - if processing an algorithm improves the functionality of the computer, then the computer and the algorithm would together form a single actual invention that would be patentable.
- [30] The above factors and the general concerns around the well-known use of a computer to process new abstract algorithms can be seen to involve considerations of novelty or ingenuity. Canadian law does not prohibit considerations of the novelty or ingenuity of elements of a claim in considering patentable subject-matter and finds support in situations like that of *Schlumberger* where a known tool, a computer, is used to give an abstract mathematical formula a practical application (*Benjamin Moore* at paras 69 to 70, referring to *Amazon*). These considerations assist in the determination of the discovery or new knowledge, the method of its

application and the actual invention (*Benjamin Moore* at para 89) that is ultimately measured against the physicality requirement.

- [31] As noted in *Benjamin Moore* at para 94 (and similarly expressed in *Amazon* at para 61), the physicality requirement will not likely be satisfied without something more than only a well-known instrument, such as a computer, being used to implement an abstract method. The factors set out above from *PN2020-04* assist in determining whether something more is present.

Analysis

- [32] The PR letter explained why we preliminarily determined that claims 1 to 21 are directed to non-patentable subject-matter.

The R-FA (pages 2 to 4) argued that the computer elements, the feature of receiving a notification of products purchased from a point-of-sale device using a loyalty card associated with the loyalty profile, and “a scanning aspect” (claims 20 and 21) are essential, which would render the claimed subject-matter patentable.

The SOR (pages 2 and 3) stated:

[T]he actual invention is considered to be performing the steps of storing a plurality of records comprising nutritional information related to products available for purchase using a loyalty profile associated with a customer; receiving a notification of products purchased using a loyalty card associated with the loyalty profile; associating the nutritional information related to products available for purchase using the loyalty profile with the products purchased by the consumer using the loyalty card associated with the loyalty profile; comparing the quantity of the nutritional element present in the products purchased using the loyalty profile aggregated over the historical time range with standardized

intake guidelines; identifying a first deficiency and creating a meal plan to compensate for the first deficiency; identifying a second deficiency present in the meal plan and matching the meal plan with one or more recipes containing ingredients that compensate for the second deficiency; verifying the matching of meal plan with the one or more recipes does not exceed the standardized intake guidelines; and outputting the meal plan. However, these steps do not appear to improve the functioning of the computer, thereby the computer is not considered to be part of the actual invention. As such, the Examiner considers that the subject matter defined by claims 1–21 is not a patentable subject matter under subsection 27(8) of the *Patent Act*.

We preliminarily agree with the SOR that the computer elements cannot be considered part of the actual invention, for reasons stated below.

In order to determine whether the claims on file define patentable subject-matter, the actual invention needs to be identified. In this case, it is our preliminary view that the actual invention is limited to an abstract algorithm for nutritional planning comprising data manipulation steps and abstract rules for the reasons below.

Although we preliminarily consider all the claimed elements, including the computer elements, as essential, the mere fact that these elements are essential elements does not necessarily mean that the claimed invention is directed to patentable subject-matter. In our preliminary view, the computer elements are not considered to be part of the actual invention.

Both the description and the R-FA state that the computer elements “may be implemented on any general-purpose computer” (paragraph [0065] of the description, also page 2 of the R-FA). Paragraph [0065] to [0069] of the instant application also recite a generic computer

system with conventional input, output, storage, communications, and data processing components. As stated in *Benjamin Moore*, “if the only new knowledge lies in the method itself, it is the method that must be patentable subject matter. If, however, the new knowledge is simply the use of a well-known instrument (a book or a computer) to implement this method, then it will likely not fall under the definition found at section 2 without something more to meet the requirement described at paragraph 66 of *Amazon*” (para 94). For the instant application, the computer elements as claimed are merely being used to make the kind of generic calculations and data processing they are known to make (see *Schlumberger*). There is nothing in claim 1 to suggest that the computer elements are used for any purpose beyond well-known generic data processing operations. Therefore, it is our preliminary view that the “new knowledge” or “discovery” does not include the computer implementation, and the computer elements do not form part of the actual invention.

Similarly, the specification does not disclose or suggest anything beyond conventional hardware/software to implement the notification, the scanning operation, and the point-of-sale terminal. These were well-known tools at the relevant date. In our preliminary view, they do not add something more to meet the requirement described at paragraph 66 of *Amazon*, and are not part of the actual invention.

Since the actual invention is limited to an abstract nutritional planning algorithm comprising abstract rules regarding creating and adjusting a meal plan, it is our preliminary view that the claimed subject-matter is not considered “something with physical existence, or something that manifests a discernible effect or change” (*Amazon*, para 66). Accordingly, in our preliminary view, claims 1 to 21 on file are directed to non-patentable subject-matter and do not comply with section 2 of the *Patent Act*. Furthermore, since the abstract data operations and rules are akin to a “mere scientific principle or

abstract theorem,” they are also prohibited under subsection 27(8) of the *Patent Act*.

[33] In the absence of further submissions from the Applicant, we conclude that claims 1 to 21 do not comply with section 2 and subsection 27(8) of the *Patent Act*.

OBVIOUSNESS

Legal Principles

[34] Section 28.3 of the *Patent Act* requires claimed subject matter to not be obvious:

The subject-matter defined by a claim in an application for a patent in Canada must be subject-matter that would not have been obvious on the claim date to a person skilled in the art or science to which it pertains, having regard to

- (a) information disclosed before the one-year period immediately preceding the filing date or, if the claim date is before that period, before the claim date by the applicant, or by a person who obtained knowledge, directly or indirectly, from the applicant in such a manner that the information became available to the public in Canada or elsewhere; and
- (b) information disclosed before the claim date by a person not mentioned in paragraph (a) in such a manner that the information became available to the public in Canada or elsewhere.

[35] In *Apotex Inc v Sanofi–Synthelabo Canada Inc*, 2008 SCC 61 at para 67, the Supreme Court of Canada stated that it is useful in an obviousness inquiry to follow the following four-step approach:

- (1)(a) Identify the notional “person skilled in the art;”
 - (b) Identify the relevant common general knowledge of that person;
- (2) Identify the inventive concept of the claim in question or if that cannot readily be done, construe it;
- (3) Identify what, if any, differences exist between the matter cited as forming part of the “state of the art” and the inventive concept of the claim or the claim as construed;
- (4) Viewed without any knowledge of the alleged invention as claimed, do those differences constitute steps which would have been obvious to the person skilled in the art or do they require any degree of invention?

Analysis

[36] The PR letter explained why we preliminarily considered that claims 1 to 21 would not have been obvious to the skilled person.

FA indicated the following references as relevant:

- D1: US 2003/0171944 A1 September 11, 2003 Fine et al.
- D2: US 6975910 B1 December 13, 2005 Brown et al.

D1 is directed to a system and application for providing a shopper with alternative products in response to a particular product selected by the shopper and a preselected goal of the shopper. D2 is directed

to a method and system for managing an electronic cookbook to meet the dietary needs of users.

The FA indicated that claims 1 to 21 would have been obvious in view of D1 and D2 and the relevant CGK of the person skilled in the art.

In our preliminary view, claims 1 to 21 would not have been obvious in view of the cited prior art and the CGK, considered individually or in combination.

(1)(a) Identify the notional person skilled in the art

(b) Identify the relevant CGK of that person

The person skilled in the art and their relevant CGK have been identified above under "Purposive construction." The above identification of the relevant CGK as of the publication date is also considered to be valid as of the claim date and thus applicable for the purpose of assessing obviousness.

(2) Identify the inventive concept of the claim in question or if that cannot readily be done, construe it

As previously explained, all claimed elements are presumed to be essential for this review. Therefore, we take into account all elements of the claims as representing their inventive concepts for the consideration of obviousness.

(3) Identify what, if any, differences exist between the matter cited as forming part of the "state of the art" and the inventive concept of the claim or the claim as construed

The FA (pages 7 to 8) indicated that D1 discloses all claimed features of independent claims 1, 7, and 12 with the exception of "identifying a second deficiency for a quantity of another nutritional element

present in the meal plan, wherein the second deficiency is an inadequate amount of the other nutritional element; matching the meal plan with one or more recipes containing ingredients that compensate for the second deficiency; verifying the matching of the meal plan with the one or more recipes does not exceed the standardized intake guidelines; and transmitting the meal plan matched with the one or more recipes that compensate for the second deficiency.”

We preliminarily consider D1 as the closest prior art. We also consider D2 below since the FA indicated that D2 discloses some of the claimed features.

Regarding independent claims 1, 7, and 12, D1 discloses the following features:

- storing, by a processor, in a database coupled to a central terminal, a plurality of records comprising nutritional information related to products available for purchase using a loyalty profile which is associated with a consumer, wherein the nutritional information comprises a nutritional element of the products available for purchase (D1: paragraphs [0060] and [0061], “*the historical shopping data is stored at a central database(s) 150 and retrieved upon authentication of the end user... The user can belong to a ‘loyalty program’... the database 150 includes historical purchase data for individual users, loyalty card information for individual users, nutritional information for grocery items offered for sale, and lists of ingredients for recipes or complete meals.*”);
- receiving a notification of products purchased using a loyalty card associated with the loyalty profile (D1: paragraph [0062], “*The shopping assistance application can periodically receive updates of loyalty card information...the shopping assistance application*”);

receives, on a daily basis, a list of grocery purchases from a store partner”);

- upon receiving the notification, associating, by the processor, in the database, the nutritional information related to products available for purchase using the loyalty profile with the products purchased by the consumer using the loyalty card associated with the loyalty profile, wherein the nutritional information relating to the products purchased comprises a quantity of the nutritional element present in each of the products purchased (D1: paragraphs [0062] and [0065], “*The shopping assistance application can periodically receives updates of loyalty card information... the database record includes fields for the amount of each nutrient included in the food item, such as: calories; fat; calories; total fat; saturated, unsaturated and polyunsaturated fats; cholesterol, sodium ...*”);
- creating and adjusting a meal plan with references to standardized intake guidelines (D1: paragraphs [0074] and [0075], “*recipe information in the database can be searched and edited in a similar fashion to the searching and editing of product information described above. FIG. 12, illustrates a web page 1200 for editing a selected recipe from the database. The administrative user is able to modify the ingredients, instructions, meal type and servings associated with the recipe... the database 150 can be updated or supplemented with United States Department of Agriculture (USDA) information.*”); and
- transmitting the meal plan for display on a consumer computer via a network connection (D1: paragraph [0058] and Fig. 3J, “*a web page providing the user with detailed information on a recipe*”).

In our preliminary view, the differences between D1 and the inventive concepts of the independent claims are:

- (a) the notification of product purchased using a loyalty card is received from a point-of-sale device;
- (b) aggregating the quantity of the nutritional elements present in the products purchased using the loyalty profile over a historical time range;
- (c) comparing the aggregated quantity of the nutritional elements with standardized intake guidelines;
- (d) identifying a first nutritional deficiency based on comparison;
- (e) creating a meal plan that compensates for the first nutritional deficiency;
- (f) identifying a second nutritional deficiency of another nutritional element present in the meal plan;
- (g) matching the meal plan with one or more recipes containing ingredients that compensate for the second deficiency; and
- (h) verifying the matching of the meal plan with the one or more recipes does not exceed the standardized intake guidelines.

The FA argued (pages 7 to 8) that D1 discloses identifying nutritional deficiencies in paragraph [0016], and aggregating the quantity of the nutritional elements in paragraphs [0060] and [0061] (differences (b), (c), (d), and (f)). In pages 3 to 4, the R-FA contended that D1 does not disclose these features. We preliminarily agree with the Applicant that D1 does not disclose these features for reasons stated below.

For reference, paragraphs [0016], [0060], and [0061] of D1 are reproduced below:

[0016] Another embodiment of the present invention is a programmed computer for enabling shopping for

groceries and nutritional supplements based on predefined nutritional goals. The computer includes a database of nutritional information directed to at least one of groceries and nutritional supplements and a database of user information comprising the nutritional goals of an individual user.

[0060] The shopping assistance application preferably uses historical shopping data associated with a user. In one embodiment, the historical shopping data can be retrieved from a smartcard. In other embodiments, the historical shopping data is stored at a central database(s) 150 and retrieved upon authentication of the end user using, for example, a known password, a shared secret hierarchy, biometrics, etc. The user can belong to a "loyalty program" offered by the vendor operating the server 102 and the shopping assistance application. The user can enter his or her loyalty program number as an identifier, whereupon the shopping assistance application takes additional steps to verify the user's identity or proceeds to obtain information concerning the user's past purchases from the database 150.

[0061] In a preferred embodiment of the present invention, the database 150 includes data from multiple sources. In one embodiment, the database 150 includes historical purchase data for individual users, loyalty card information for individual users, nutritional information for grocery items offered for sale, and lists of ingredients for recipes or complete meals. In another embodiment, the database(s) 150 includes a table of food ingredients a user wishes to avoid (user avoidance list), a grocery categorization hierarchy, and various precomputed metrics to enable the grocery

substitution feature, as discussed in further detail below. Additional data sources of disparate types can be identified and integrated into the shopping assistance application.

Although paragraph [0016] of D1 recites “nutritional supplements based on predefined nutritional goals,” in our preliminary view, this paragraph does not disclose or suggest the identification of nutritional deficiencies. First, there is no explicit disclosure of the feature of identifying nutritional deficiencies anywhere in D1. Second, the nutritional goals in D1 appear to focus on dietary preferences and choices rather than compensating for nutritional deficiencies (see exemplary nutritional goals of “Less Total Fat, Fewer Calories,” “maximize a nutrient,” and “minimize a nutrient” in paragraphs [0053] to [0058] and [0084]). Therefore it is our preliminary view that the skilled person would understand that D1 does not disclose or suggest the feature of identifying nutritional deficiencies.

Further, although paragraphs [0060] and [0061] of D1 recite tracking historical shopping data of a user using a loyalty program, these paragraphs do not disclose or suggest the feature of aggregating the quantity of the nutritional elements over a historical time range.

The FA further stated in page 8 that D1 discloses difference (e) in paragraph [0012], which is reproduced here:

[0012] Another embodiment of the present invention is directed to a method for enabling meal preparation based on predefined nutritional goals. The method includes receiving a first list of at least one nutritional goal and providing at least one recipe for at least one meal in furtherance of the at least one goal in the first list.

We are of the preliminary view that this paragraph does not disclose or suggest difference (e). It merely teaches providing a recipe based on “predefined nutritional goals.” Paragraphs [0047] and [0053] to [0058] of D1 provide some examples of these nutritional goals, which do not seem to teach or suggest “compensation for nutritional deficiencies.”

With respect to differences (g) and (h), the FA appears to admit that D1 does not teach or suggest these features (page 8). With respect to difference (a), although D1 discloses the usage of a loyalty program in paragraph [0060], it does not mention that the receiving means is a point of sale device. Therefore, we preliminarily conclude that D1 does not teach or suggest differences (a), (g), and (h).

The FA further argued (pages 8 to 9) that D2 disclosed identifying nutritional deficiencies and matching a meal plan that compensates for the identified nutritional deficiencies in Figure 6 and column 5, lines 50–59 (differences (d)–(g)).

We preliminarily disagree. D2 discloses creating/selecting a meal plan based on the dietary needs of a user (see column 2, lines 17 to 27, and column 9, lines 47 to 60), wherein dietary needs include “*daily food allowances... including serving size, calories, fat, carbohydrates, sodium, cholesterol, protein... extra and/or preferred dietary items, such as sugar, alcohol, etc.*” (column 5, lines 52 to 59). In this context, the skilled person would understand that “dietary needs” in D2 are directed to food allowances and preferences, not to nutritional deficiencies that need to be compensated. Further, D2 does not disclose or suggest the feature of designing a meal plan for compensating identified nutritional deficiencies.

In light of the above, we are of the preliminary view that neither D1 nor D2 discloses differences (a) to (h).

(4) Viewed without any knowledge of the alleged invention as claimed, do those differences constitute steps which would have been obvious to the person skilled in the art or do they require any degree of invention?

As discussed above in step (3), neither D1 nor D2 discloses or suggests the features of aggregating quantity of nutritional elements present in purchased products using a loyalty profile over a historical time range, identifying nutritional deficiencies present in the products purchased, and creating and adjusting a meal plan to compensate for the identified deficiencies (differences (b) to (h)).

Further, in our preliminary view, there is nothing in the CGK that would disclose or suggest the claimed combination of differences (b) to (h).

Therefore, it is sufficient for us to conclude that claims 1, 7, and 12 would not have been obvious in view of D1, D2, and the relevant CGK, considered separately or in combination. However, for completeness, we also review what was known in the CGK regarding difference (a).

In our preliminary view, to the skilled person with knowledge of loyalty profile management, the features of utilizing a loyalty card at a point of sale device to associate purchased products with a loyalty profile, and subsequently transmitting a notification to update the loyalty profile with the new purchase record were common business practices at the relevant date, which do not require any degree of invention. Therefore, we preliminarily consider that difference (a) would have been obvious to the skilled person.

In light of the above, we are of the preliminary view that claims 1, 7, and 12 on file would not have been obvious to the skilled person in view of the cited prior art and the relevant CGK, and are therefore compliant with section 28.3 of the *Patent Act*. Since dependent

claims 2 to 6, 8 to 11, and 13 to 21 include all of the essential elements of claims 1, 7, and 12, respectively, it follows that these claims are also unobvious and comply with section 28.3 of the *Patent Act*.

[37] In the absence of further submissions from the Applicant, we conclude that claims 1 to 21 comply with section 28.3 of the *Patent Act*.

INDEFINITENESS

Legal Principles

[38] Subsection 27(4) of the *Patent Act* requires claims to define subject-matter distinctly and explicitly:

The specification must end with a claim or claims defining distinctly and in explicit terms the subject-matter of the invention for which an exclusive privilege or property is claimed.

[39] In *Minerals Separation North American Corp v Noranda Mines Ltd*, [1947] Ex CR 306, 12 CPR 99, at page 146, the Court emphasized both the obligation of an applicant to make clear in the claims the ambit of the monopoly sought and the requirement that the terms used in the claims be clear and precise:

By his claims the inventor puts fences around the fields of his monopoly and warns the public against trespassing on his property. His fences must be clearly placed in order to give the necessary warning and he must not fence in any property that is not his own. The terms of a claim must be free from avoidable ambiguity or obscurity and must not be flexible; they must be clear and precise so that the public will be able to know not only where it must not trespass but also where it may safely go.

Analysis

[40] The PR letter preliminarily considered that claims 7 and 20 are indefinite.

- claim 7: this claim recites “a third database.” However, other claimed elements do not utilize or interact with this database, which renders the subject-matter unclear.
- claim 20: this claim recites “[t]he method of claim 7.” However, claim 7 is directed to a computer-readable medium, not a method.

[41] In the absence of further submissions from the Applicant, we conclude that claims 7 and 20 do not comply with subsection 27(4) of the *Patent Act*.

CONCLUSIONS AND RECOMMENDATION OF THE BOARD

[42] In view of the above, we are of the view that:

- Claims 1 to 21 are directed to non-patentable subject-matter and do not comply with section 2 and subsection 27(8) of the *Patent Act*;
- Claims 1 to 21 would not have been obvious and comply with section 28.3 of the *Patent Act*;
- Claims 7 and 20 are indefinite and do not comply with subsection 27(4) of the *Patent Act*.

[43] Accordingly, we recommend that the application be refused on the grounds that claims 1 to 21 do not comply with section 2 and subsection 27(8) of

the *Patent Act*, and that claims 7 and 20 do not comply with subsection 27(4) of the *Patent Act*.

Liang Ji

Michael Ott

Christine Teixeira

Member

Member

Member

DECISION OF THE COMMISSIONER

[44] I concur with the conclusions and recommendation of the Board that the application be refused on the grounds that:

- Claims 1 to 21 are directed to non-patentable subject-matter and do not comply with section 2 and subsection 27(8) of the *Patent Act*; and
- Claims 7 and 20 are indefinite and do not comply with subsection 27(4) of the *Patent Act*.

[45] Accordingly, I refuse to grant a patent for this application in accordance with section 40 of the *Patent Act*. Under section 41 of the *Patent Act*, the Applicant has six months to appeal my decision to the Federal Court of Canada.

Konstantinos Georgaras

Commissioner of Patents

Dated at Gatineau, Quebec
this 26th day of April, 2024.