

Commissioner=s Decision # 1322

Décision du Commissaire # 1322

TOPIC: F - 01, O - 00

SUJECT: F - 01, O - 00

Application No : 2,454,966

Demande no : 2,454,966

COMMISSIONER'S DECISION SUMMARY

C.D. 1322, Application 2,454,966

Anticipation, Obviousness

The Examiner rejected the application stating that the claims were obvious and anticipated in view of the cited prior art. The application concerns a wireless device which reminds a user about a pending task in its to-do list whose accomplishment has a geographic aspect. The current time and the user's current geo-location are used to determine whether to output a reminder for a task in a user's to-do list.

The application was refused by the Commissioner of Patents.

IN THE CANADIAN PATENT OFFICE

DECISION OF THE COMMISSIONER OF PATENTS

Patent application number 2,454,966, having been rejected by the Examiner under subsection 30(3) of the *Patent Rules*, was reviewed by the Patent Appeal Board and by the Commissioner of Patents. The recommendation of the Board and the decision of the Commissioner follow.

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Introduction

[1] This decision relates to patent application number 2,454,966 which was filed on 12 January 2004, claiming a priority date of 23 January 2003, and is entitled ALOCATION-BASED TO-DO LIST REMINDERS@. The Applicant is AVAYA TECHNOLOGY CORP and the inventor is Doree Duncan Seligmann. Examination was requested on 12 January 2004 and three reports were issued beginning on 25 May 2006. The Examiner issued a Final Action on 25 June 2009 rejecting the application for claiming obvious subject matter. New claims were submitted in response to the Final Action on 22 December 2009, and the Examiner forwarded the application to the Board

along with a Summary of Reasons (SOR) dated 29 June 2010, stating that the claims were anticipated and obvious in view of the prior art on file.

[2] On 16 March 2011 the Board invited the Applicant to a hearing in a letter which included the SOR. Applicant responded on 14 April 2011 requesting a decision without a hearing. No written submission was made.

Invention

[3] The invention is to enable a wireless device to determine whether to remind a user about a pending task in a to-do list whose accomplishment has a geographic aspect. In particular, the device takes into account the current location of the device and the geo-locations of tasks in the to-do list. The device may also take into account its speed and direction, the current time, and the priorities and due dates of the tasks in the list.

Claims

[4] Prior to the Final Action, the Applicant asserted that using *said speed* for determining whether to output a reminder was inventive. In response to an argument in the Final Action that claim 1 was obvious, *said speed* in claim 1 was substituted with *the current time*, thus broadening its scope.

[5] Claim 1 defines the invention as follows:

1. An apparatus comprising:
a memory for storing a to-do list, wherein said to-do list comprises at least one task, and wherein each said task is associated with a respective geo-Location; and
a processor for:
 - (a) receiving a current geo-Location; and
 - (b) determining whether to output a reminder based on said current geo-location, said respective geo-Locations and the current time.

[6] The remaining claims ultimately depend on claim 1. Claim 2 stipulates that determining (whether to output a reminder)

is also based on the direction (of travel). Claim 3 states that determining whether to output a reminder takes into account *which of said respective geo-locations is within a distance threshold of said current geo-location*. Claim 4 specifies that the distance threshold is based on speed, i.e. the threshold used will be different at different speeds.

[7] Claim 5 provides for:

5. The apparatus of claim 3 wherein:

said processor is also for choosing a selected task in said to-do list, wherein the geo-location associated with that task is within said distance threshold of said current geo-location; and

said reminder is based on said selected task.

[8] Claim 5 includes the phrase "choosing a selected task". In the description (paragraph [0006]), the term *selected* is used to say that one of the tasks could be *selected* based on a variety of factors (closest, highest priority, due-date) to avoid overwhelming the user with reminders. Paragraph [0022] states that the set of tasks in the to-do list that have a geo-location within a distance threshold of a current geo-location is determined and stored in variable S. Paragraph [0024] states that *tasks are selected from S (if S is non-empty) based on one or more of the following properties: geo-location with respect to the user's direction of travel; proximity to geo-location γ ; priority; due date; and the time at which a reminder for the task was last generated*. We interpret claim 5 as meaning choosing (based on some unspecified criteria) a task from the tasks for which it was determined a reminder could be output or, in other words, choosing (based on some unspecified criteria) a task from the tasks which have been selected to have reminders based on the distance threshold.

[9] Claim 6 states: *The apparatus of claim 5 wherein said selected task is chosen based on the distance between said current geo-location and the geo-location associated with said selected task*. Thus, of the tasks that are selected for having geo-locations within a distance threshold, the apparatus will

choose from among those tasks based on distance. This is a further filtering of tasks.

[10] Claim 7 states: *The apparatus of claim 6 wherein said selected task is also chosen based on said current geo-location's proximity to at least one other of said geo-locations within said distance threshold.* The expression *at least one other of said geo-locations* could refer to those [respective] geo-locations corresponding to other selected tasks. Thus, as per paragraphs [0006] and [0024] in the description, proximity to the other tasks in the set of tasks S, is used to choose. On the other hand, *at least one other of said geo-locations* could be other current geo-locations which the user has visited. For the purposes of this recommendation, the Board will adopt the first interpretation, i.e. that *one other of said geo-locations* are the [respective] geo-locations corresponding to other selected tasks. This appears to be the most consistent with the description.

[11] Were a patent ultimately to issue on this application, the Board would recommend that amendments be made to the claims to ensure that the claim interpretations above clearly follow from the claim language.

Prior Art Relied Upon

[12] The Examiner relies on the following prior art:

United States Patents

D1	5938721	17 August 1999	Dussell et al.
D2	5790974	4 August 1998	Tognazzini
D3	6212470	3 April 2001	Seymour et al.

United States Patent Application

D4	2002/0067308	6 June 2002	Robertson
D5	2002/0086680	4 July 2002	Hunzinger

[13] The aforementioned prior art is citable on the basis of the priority date of the application being 23 January 2003.

Rejection under Appeal

[14] The Examiner rejects the application, stating that the amended claims are defective as follows:

- < Claims 1, 3, 6 and 7 are anticipated by D4;
- < Claims 2, 4 and 5 are obvious in light of the teachings of D4 in view of D2
- < Claims 1-3 and claims 5-7 are obvious in light of the teachings of D1 in view of D5, and claim 4 is obvious in view of the common general knowledge when combined with D1 and D5.

[15] It can be understood from the Final Action that claim 6, being dependant on claim 5, can be anticipated only if, as an initial matter, claim 5 is found to be anticipated. So we will also consider whether claim 5 is anticipated by D4. As to obviousness of claims 2, 4 and 5, we take it that claims 1 and 3, upon which they depend, were considered to be obvious from D4, given that these claims were held to be anticipated in view of D4. Although the SOR states explicitly that claim 4 is obvious in view of the common general knowledge when combined with D1 and D5, the SOR references some facts of D3 to illustrate the state of the art applied to claim 4, consistent with the arguments in the Final Action. Therefore, we will consider whether or not claim 4 is obvious in view of any combination of D1, D3 and D5.

Anticipation

Examiner=s findings

[16] Anticipation is set out in the SOR in response to the amended claims. As we noted earlier, the amendment made to the claims in response to the Final Action broadened claim 1. The Examiner cites various passages from D4 to say that claims 1, 3, 6 and 7 are anticipated.

Applicant=s contention

[17] The Applicant made no submission in response to the SOR and the finding of anticipation. However, D4 was addressed in response to the finding of obviousness in the Final Action. The Applicant argued that it does not teach *determining whether to output a reminder for a task in a to-do list based on a user's current location and the current time.*

Principles of law (anticipation)

[18] The admissibility of prior art in assessing novelty is set out in subsection 28.2(1) of the *Patent Act*. In *Apotex Inc. v. Sanofi-Synthelabo Canada Inc.*, 2008 SCC 61 [*Sanofi*], at paragraphs 24-27 and 33-37, the Supreme Court stated that in order to be anticipatory, a single piece of prior art must both: (a) disclose the invention of the patent in question; and (b) enable a skilled reader to make the invention using the prior art reference and common knowledge, allowing for some (uninventive and not unduly burdensome) trial and error experimentation to make it work.

[19] Where the essential elements of a claimed invention (the elements required for its proper operation) are disclosed in a single, enabling disclosure, that claimed invention is anticipated (*Free World Trust v. Électro Santé Inc.*, 2000 SCC 66 at paragraph 25; *Shire Biochem Inc. v. Minister of Health*, 2008 FC 538 at paragraph 75 [*Shire*]; *Eli Lilly and Company v. Apotex Inc.*, 2009 FC 991 at paragraph 397 [*Eli Lilly*]). Clearly, however, if all the elements of a claimed invention can be found in an enabling reference, anticipation can be shown without needing to identify which elements are essential (See *Shire* at paragraph 22).

Fact findings from D4

[20] D4 combines a Global Positioning System (GPS) with a personal electronic device such as a PDA (Personal Digital Assistant). The system references (or links) the location or GPS coordinates to a particular task stored in resident memory and activates a reminder which notifies the user of a particular

task when the user is within a specified geographic area.

[21] Other notable features from D4 are:

< One or more location-based reminders associated with task entries in a "to do" list are maintained in a resident memory of the electronic device or in another appropriate storage device (D4: paragraph [0038], lines 1-4).

< The user may selectively create, edit, open, close, cancel, organize, delete, manage and/or otherwise manipulate task entries and/or the location-based reminders. Each location-based reminder has a designated location selected or set by the user (D4: paragraph [0038], lines 9-13).

< Time-based reminders are optionally combined with location-based reminders (D4: paragraph [0042], lines 1-14; paragraph [0052], lines 1-5) such that *the reminder would operate as a location-based reminder . . . and would concurrently operate as time-based reminder in the usual manner*. For example, it is stated that *even if the user does not carry the portable electronic device into the vicinity of the designated location, the reminder is still triggered at the expiration of the time period defined by the due date or deadline*.

< It is implicit in D4 that a processor is used and the actual location is compared to the designated locations of each location-based reminder (D4: paragraph [0040], lines 1-4).

Analysis

[22] As noted in *Shire* (paragraph 22), it is important to know and focus on where the disputes lie. Thus, the question of novelty can be resolved in the present case by considering the aspect or features of the claimed invention which appear to form the basis for disagreement. The only feature which the Applicant contends (albeit under obviousness) is not disclosed

by D4 is determining whether to output a reminder for a task in a to-do list based on a user's current location and the current time. The Board does not agree that this feature is not disclosed by D4. The Applicant's correspondence makes the distinction that *location and the current time* implies a reminder might not be output even when a user is close to a task's geo-location, if there was already a reminder in the last four hours. The correspondence also states that a user might not be reminded about a task to *pick up jacket from cleaners* when the user drives by the cleaners at 11:00 p.m. Neither of these limitations is explicit in claim 1 such that the arguments from the SOR pertaining to anticipation by D4 can be traversed.

[23] On a fair reading, claim 1 is defining that determining whether to output a reminder is based on said current geo-location, the task's respective geo-location, and the current time. This is disclosed by D4 in that time-based reminders may be combined with location-based reminders (D4: paragraph [0042], lines 1-14). That is, a reminder may (optionally) be set by the user to have both a designated location and a due date or deadline. The reminder would operate as a location-based reminder as detailed above, and would concurrently operate as a time-based reminder in the usual manner. Thus, the reminder in D4 may be triggered based on the current geo-location and the expiration of the time period defined by the due date or deadline.

[24] We find that D4 discloses the invention in claim 1 and provides all of the information needed to enable a skilled reader to make the invention in claim 1 without the exercise of any inventive skill.

[25] Although Applicant has not contended any other features of the claims are novel over D4, we will consider the additional elements of the other claims for completeness. Claim 3 specifies that *the determination whether to output a reminder comprises determining which of said respective geo-locations is within a distance threshold of said current geo-location*. This is the same as the tolerance parameter feature disclosed by D4 (paragraph [0038]) whereby a user may specify the distance from the designated location within which the location-based

reminder is triggered. For example, the reminder is triggered when the user is anywhere inside a 5-mile radius from the designated street address. Claim 3 is anticipated by D4.

[26] Claim 5 limits the apparatus of claim 3 in that *said processor is also for choosing a selected task in said to-do list* from among the tasks with an associated geo-location within the distance threshold of the user. As discussed earlier, *choosing a selected task* is taken to mean that a reminder is only generated for some selected tasks that meet the distance threshold. The choice of a particular selected task involves unspecified criteria, for example, those set out in paragraph [0024] but not claimed. As we discussed in relation to claim 3, paragraph [0038] of D4 describes the tolerance parameter feature whereby a user may specify the distance from the designated location inside which the location-based reminder is triggered (this *primary range* is equivalent to the distance threshold). In paragraph [0058], additional tolerance parameters, such as a delay or a secondary range may be used to prevent re-triggering of reminders, which is the same as generating a reminder for only some of the selected tasks that meet the distance threshold. Claim 5 is anticipated by D4.

[27] Claim 6 stipulates that the selected task is chosen in claim 5 *based on the distance between said current geo-location and the geo-location associated with said selected task*. D4 explains (in paragraph [0058]) that a *secondary range defines the distance which the user has to travel from the designated location to count as an exit therefrom. . . . until outside the secondary range the location-based reminder will not reset*. In this manner, a dead-band between the *primary range* and the *secondary range* is created which prevents annoying repetitive triggers when travelling therein. This is the same as choosing a selected task based on distance between the *current geo-location and the geo-location associated with said selected task*. Claim 6 is anticipated by D4.

[28] Claim 7 depends on claim 6, and states that *said selected task is also chosen based on said current geo-location's proximity to at least one other of said geo-locations within said distance threshold*. As we discussed, *one other of said*

geo-locations is a [respective] geo-location corresponding to another selected task. Since D4 does not explicitly teach this feature, we must consider whether or not D4 teaches the essential functionality of claim 7. It appears to be essential that the act of choosing serves to avoid overwhelming the user with reminders, and that it does so by comparing possible choices; see paragraphs [0006] and [0024] of the instant application.

[29] D4 discusses in paragraph [0058] a solution to the same technical problem: a need to *prevent annoying repetitive triggers*. However, the solution disclosed in D4 is different from that of claim 7. D4 teaches that the tolerance parameters may also include a secondary range further out from the designated location than the primary range. The secondary range defines the distance which the user has to travel from the designated location to count as an exit therefrom. Thus, D4 is filtering eligible reminders by creating a dead-band between two ranges, whereas claim 7 involves the filtering of eligible reminders by comparing a characteristic of the reminders. Therefore, D4 does not disclose and enable all the essential elements of claim 7. Claim 7 is not anticipated by D4.

Conclusion - Anticipation

[30] The Board finds that claims 1, 3, 5 and 6 were anticipated by D4 before the claim date. Claim 7 is not anticipated by D4.

Obviousness

Examiner=s findings

[31] The factual basis supporting the Examiner=s *prima facie* conclusion of obviousness is set out in the SOR (under the headings B1, B2, B3) and the Final Action.

Applicant=s contention

[32] Applicant made no submission or rebuttal in response to the SOR, so, the arguments in response to the Final Action will

be assessed. The distinguishing features contended by Applicant are:

- A. *Determining whether to output a reminder for a task in a to-do list based on a user's current location and the current time. The Applicant contends that none of D1, D2, D3 or D4 teach or suggest this feature.*
- B. *A reminder might not be output, even when a user is close to a task's geo-location, if there was already a reminder in the last four hours (specification, paragraph [0025]) - thereby avoiding situations in which a user who repeatedly passes by a geo-location during the course of a day is bombarded with reminders.*
- C. *A user might not be reminded about a task to "pick up jacket from cleaners" when the user drives by the cleaners at 11:00 pm.*

Principles of law (obviousness)

[33] Section 28.3 of the *Patent Act* provides that *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.*

[34] A four step approach for assessing obviousness is set out in *Sanofi*, as follows:

- (1) (a) Identify the notional *A* 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 *A* 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

Step 1: Notional "person skilled in the art" and the relevant common general knowledge of that person

[35] The Final Action states (page 2, 1a-1b) that *The person skilled in the art is a person familiar with computer programming, personal digital assistants, and geospatial positioning devices. It adds that the skilled person is knowledgeable in programming personal digital assistants, task software, and understands the technology behind geospatial positioning devices. Furthermore, a person skilled in the art would know how to output a reminder based on a specific location, and also how to notify the user appropriately.* The response to the Final Action did not address or disagree with this assessment. The Examiner's position appears reasonable and is adopted as a part of these reasons.

[36] The Final Action (page 3, first paragraph) also states that *it is well known in the art of navigation systems to alert the user of an upcoming event (such as a change of the road or driving direction) so as to provide the user with enough time to react to the event.* Acknowledging that D1 does not teach *receiving a direction*, the Final Action (page 4) notes that *it is well known in the art that before alerting a user of a reminder or action in navigational systems to determine if the user is approaching or departing a location.* The response to the Final Action did not disagree with this. We accept that it was common general knowledge on the claim date that a (GPS) navigation system would alert the user of an upcoming change of driving direction.

Step 2: Inventive concept

[37] In response to the Final Action, the Applicant asserted that determining whether to output a reminder based on the user's current geo-location and the current time distinguishes the claimed matter over the prior art. The Examiner appears

to have accepted this, and in the SOR states that the *inventive concept of the claims is to output a to-do list item reminder based on the user's current geo-location and the current time*. There is no submission from the Applicant addressing this conclusion in the SOR.

[38] Having regard to the specification and drawings, we are of the opinion that basing the determination to output a reminder, in part, on the current time is not part of the advance described in this application. Nothing in any of the claims refers to how the current time is used, or suggests why it is needed. In addition, nothing in the "field of the invention" or "summary of the invention" sections of the description (paragraphs [0001] and [0004]-[0007.2]) suggests a need for the invention to base the determination on the current time, or that this should be considered part of the advance proposed by the inventor. In fact, the description (paragraphs [0002]-[0006]) generally describes the prior art systems as basing determinations on current time, and the instant invention as overcoming prior art limitations by basing the determination, in part, on the user's location. Furthermore, although the drawings and description (figure 1; paragraphs [0013]-[0018], [0024], [0025], [0029] and [0030]) include some references to the current time and incidentally include it in the determination to output a reminder, these parts of the application are referring to illustrative or alternative embodiments (see e.g. paragraphs [0010], [0018], [0024], [0025] and [0039]). Although the Board is not convinced that the aspect of the current time is properly part of the inventive concept, nothing turns on this point. We will therefore accept the general inventive concept as stated in the SOR.

[39] The inventive concept of claim 2 is to output a to-do list item reminder based on the user's current geo-location and the current time, as well as the direction. The inventive concept of claim 3 is to output a to-do list item reminder based on the user's current geo-location and the current time as well as whether the location associated with a task is within a certain distance threshold of the user's current location. The inventive concept of claim 4 is to output a to-do list item reminder based on the user's current geo-location and the

current time, and using a distance threshold which is based on speed.

[40] The inventive concept of claim 5 is that the invention is *choosing* (based on some unspecified criteria) a task from the tasks for which it was determined a reminder could be output or in other words it is *choosing* (based on some unspecified criteria) a task from the tasks which have been selected to have reminders based on the distance threshold.

[41] The inventive concept of claim 6 is the same as claim 5. While claim 6 states that the apparatus will choose from tasks (that are within a distance threshold) based on distance, it is not part of the advance in this application to specifically factor in distance, as opposed to any other criteria as listed in paragraphs [0024] and [0025].

[42] We find the inventive concept in claim 7 to be the nearly the same as that in claims 5 and 6, but with an additional feature. As determined earlier, it is essential that the apparatus in claim 7 chooses a selected task by comparing possible choices. As this action materially affects the way the claimed apparatus provides its solution (i.e. the action serves in this way to avoid overwhelming the user with reminders), it is also part of the inventive concept of claim 7.

Steps 3 and 4: Identification of the differences and conclusions as to obviousness

01: Obviousness of claims 1, 3 and 5 in view of D4 (Sanofi - step 3 and step 4)

[43] Although the Examiner did not explicitly address the obviousness of claims 1 and 3 in the SOR, it necessarily follows from the conclusion that claims 2 and 4 are obvious that claims 1 and 3 must also be obvious. That is, if one is to consider claims 2 and 4 to be obvious, then since claim 2 depends on claim 1 and claim 4 depends on claim 3, it follows that claims 1 and 3 must, as an initial matter, also be considered to be obvious from D4, as well. The Examiner presumably concluded that since

claims 1 and 3 were anticipated in view of D4, it meant that it was unnecessary to explicitly address obviousness of these claims in view of D4.

[44] A preliminary note, as we stated in our review of anticipation, is that features B and C pointed out by the Applicant cannot be imported into the claims, when fairly read, in order to distinguish over the prior art. Feature A is anticipated by D4 and is obvious therefrom.

[45] Given that there are no differences between the subject matter of claims 1, 3, and 5 and the teachings of D4 (in view of our analysis under anticipation); therefore, in addition to being anticipated by D4, these claims are obvious in view of D4.

O2: Obviousness of claims 2 and 4 in view of D4 and D2 (Sanofi - step 3 and step 4)

[46] We only need to make a further assessment of claims 2 and 4 in light of D4 and D2, even though the SOR also objects to claim 5. As we noted above, claims 1, 3 and 5 are obvious from D4.

Claim 2: Difference between the "state of the art" (D4 and D2) and the inventive concept (*Sanofi* - step 3) and whether it would have been obvious (*Sanofi* - step 4)

[47] Recognizing that D4 teaches all of the features of claim 1, claim 2 sets out the additional feature of receiving a direction and determining whether to output a reminder in consequence thereof, which is not explicitly taught in D4.

[48] The SOR states that D2 *discloses a processor for receiving a direction, and the determining is also based on the direction (see column 2, lines 1-4) and that it is well known in the art that before alerting a user of a reminder or action in navigational systems to determine if the user is approaching or departing a location so as to avoid alerting the user if the distance to the predetermined location is below a threshold, by determining the direction of the actual velocity and thus*

the direction of movement of the user.

[49] D2 discloses a personal calendaring system with a GPS receiver interface. There is no explicit reference to using direction of travel to determine whether to output a to-do list item reminder in D2.

[50] There is no indication in the subject application that any difficulties or problems were encountered or overcome with respect to receiving and/or obtaining a direction, and implementing a location and time reminder which is determined based on direction of travel. Therefore, any ingenuity on the claim date would exist in respect of the concept of using direction of travel.

[51] As we noted, D4 does not discuss or suggest using direction. That being said, having regard to the common general knowledge and well known capabilities of navigation systems on record, namely: alerting a user of a direction of travel, it would have been obvious to the skilled person reading D4 to determine whether to output a reminder based on direction, as set out in claim 2. Claim 2 is therefore obvious from D4, in view of common general knowledge in the art.

Claim 4: Difference between the "state of the art" (D4 and D2) and the inventive concept (*Sanofi* - step 3) and whether it would have been obvious (*Sanofi* - step 4)

[52] Claim 4 is dependent on claim 3 (which depends on claim 1). There are no differences between claims 1 and 3 and the teachings of D4 (as discussed in our analysis of anticipation by D4), therefore the difference between claim 4 and D4 is that claim 4 stipulates that the distance threshold is based on speed. Paragraph 0039 in D4 explains the use of a GPS receiver to determine the actual location of the user, and the need to maintain a *sufficiently rapid update rate to accurately reflect the user's movements*. This suggests a recognition that the faster a user is going, the more frequently the system should check if a reminder is appropriate.

[53] The Examiner cited D2 to say that it *discloses using the*

distance between two locations for the next task in an electronic calendar to determine the best travel route and travel time so as to update the time of the next appointment if necessary (see column 2, line 15 - column 3, line 2) and thus it is implied that the device of Tognazzini not only knows the traffic and route information but the speed of the user as well.

[54] In the portable calendar device of D2, a user is alerted if a calculated travel time conflicts with a start time of a scheduled appointment (column 1, lines 58-62). It is stated that an estimated travel time is calculated based on wirelessly received traffic data, the current location and the desired end location (column 2, lines 44-49). Using traffic data *ensures accurate management of calendar entries and travel time despite constant changing conditions such as traffic congestion or a sudden shutdown of a travel route* (column 2, lines 51-54). The Board is satisfied that D2 teaches a time-based reminder system and recognizes that, to be useful, the times for reminders should change if the time required to make it to the next event changes. One of the causes of this would be when traffic conditions change, which implies a change in the user's speed.

[55] As we noted in our overview of the claims, the response to the Final Action addressed the cited prior art by substituting *said speed* in claim 1 with *the current time*.

[56] Considering all of the facts before us, we find that the step of determining whether to output a reminder using a distance threshold based on speed, is obvious in view of D4 and D2.

Conclusion

[57] Claims 1, 2, 3 and 5 would have been obvious to the skilled person in view of D4. Claim 4 would have been obvious in view of D4 and D2 on the claim date.

O3: Obviousness of claims 1-3 and claims 5-7 in view of D1 and D5;
Obviousness of claim 4 in view of any combination of D1, D3 or D5.
(*Sanofi* - step 3 and step 4)

[58] This is another ground for obviousness set out by the Examiner in the SOR. As shall be seen, the question of obviousness can be resolved by considering D5 alone when assessing all of the claims, except for claim 4 and claim 7.

Claim 1: Difference between the "state of the art" (D1 and D5) and the inventive concept (*Sanofi* - step 3) and whether it would have been obvious (*Sanofi* - step 4)

[59] D1 discloses a PDA which receives position information obtained from a GPS, and indexes a database of task descriptions based on the positioning information when the information indicates that the mobile computer system is in a geographic location that facilitates completion of a task associated with the task description (column 1, lines 58-67).

[60] D5 discloses a system that allows users of wireless mobile terminals to set reminders to be triggered based on location. Paragraphs [0006] and [0007] describe the use of the terminal to set up reminders such as *buy groceries* or *pick up schematics from factory*. Paragraph [0021] states that the terminal includes memory for storing location related information and trigger or action information. The terminal has a position-monitoring function (with network assisted GPS information - see paragraph [0004]) that compares one or more *remembered* locations with current location information.

[61] D5 (figure 4; paragraphs 28, 30 and 35) further discloses that the terminal may be set to generate a reminder at a certain time. Notably, paragraph [0030] states: *The user may also select to describe the context information that describes the trigger of the reminder. This may include, for example, selecting a time and date, choosing location information or orientation/direction or trigger sensitivity.*

[62] Therefore, considering that there is no difference between the inventive concept and D5, claim 1 is obvious in view of D5.

Claim 2: Difference between the "state of the art" (D1 and D5) and the inventive concept (*Sanofi* - step 3) and whether it would have been obvious (*Sanofi* - step 4)

[63] Claim 2 sets out that the apparatus will output a to-do list item reminder based on the user's current geo-location and the current time, as well as the direction.

[64] In D5, paragraph [0007] describes triggering a location reminder only when orientation information matches up, for example, *entering the factory area*. Paragraph [0024] states that *direction of travel* is checked (step 235 of Figure 2). There being no difference between the inventive concept and D5, claim 2 is obvious in view of D5.

Claim 3: Difference between the "state of the art" (D1 and D5) and the inventive concept (*Sanofi* - step 3) and whether it would have been obvious (*Sanofi* - step 4)

[65] Paragraph [0006] of D5 specifies that monitored location information may be *a specific location description such as latitude, longitude and a radius describing a generally circular region in which the terminal is located*. Only those reminders that are within the radius will be triggered. Paragraph [0023] of D5 explains that where *the location information does describe a geographical area, then a set area may be defined in several ways: a point with a radius*. Further, paragraph [0024] of D5 explains that the terminal monitors the current location and checks whether it has *exceeded a pre-set distance from the stored location*. Thus, the distance threshold of claim 3 is known from D5.

[66] Since D5 discloses defining a point and a distance threshold for it, there is no material difference between D5 and the inventive concept, therefore, the subject matter of claim 3 is obvious in view of D5.

Claim 4: Difference between the "state of the art" (D1, D3, D5) and the inventive concept (*Sanofi* - step 3) and whether it would have been obvious (*Sanofi* - step 4)

[67] In claim 4, by using a distance threshold which is based on speed, a higher speed may increase the distance threshold used to determine whether to output a reminder, and a lower speed

may decrease that distance threshold, or vice versa.

[68] D5 is silent regarding speed. D1 (columns 2, 4, 8) teaches the use of distance thresholds, and the ability to receive speed, but not the basing of a distance threshold on the speed. In the SOR, the Examiner states that the *problem is well known in the field of navigation systems, since these systems always have to tell the driver in advance and in time when an event (such as a change of the road or driving direction) is approaching and Seymour et al. is used to show the principle of location and speed dependent warning in such a way that the timing for the warning is always adequate* (The SOR referenced these parts of D3: column 3, line 27 to column 4, line 13 and up to column 5, line 63; and Table 1 at column 4, lines 30- 47).

[69] Dussell et al. (D1) and Seymour et al. (D3) were cited in combination in the Final Action to say that claim 1 was obvious, in response to which *said speed* in claim 1 was substituted with *the current time*, for determining whether to output a reminder. Applicant made no submissions (as to the inventiveness of claim 4) in respect of the arguments set out in the SOR.

[70] We agree with the Examiner that D3 (Seymour et al.) in Table 1 (column 4) discloses speed dependant warnings. Therefore, varying the distance threshold based on the speed in the system of D5 would be obvious to the skilled person in consideration of D3. Accordingly, we find that claim 4 would have been obvious on the claim date in view of D3 and D5.

Claim 5: Difference between the "state of the art" (D1 and D5) and the inventive concept (*Sanofi* - step 3) and whether it would have been obvious (*Sanofi* - step 4)

[71] As for claim 5, it specifies a further selection or *choosing* of the set of tasks determined in claims 1 and 3 (i.e. location, time, distance threshold).

[72] As discussed, D5 uses direction of travel (paragraph 0024) as an additional factor for reminder tasks generated based on location and time, whereby a current location description may be a *radius describing a generally circular region in which the*

terminal is located (paragraph 0006). This is essentially a further selection or choosing of the tasks that have already met the location (radius) and time requirements. There is effectively no difference between claim 5 and D5, and therefore claim 5 is obvious in view of D5.

Claim 6: Difference between the "state of the art" (D1 and D5) and the inventive concept (*Sanofi* - step 3) and whether it would have been obvious (*Sanofi* - step 4)

[73] We note that checking the distance characteristic in claim 6 does not necessarily imply that the respective tasks are being prioritized or weighted against each other (with respect to distance). As we discussed earlier, the inventive concept of claim 6 is not different from claim 5. Therefore, claim 6 is obvious in view of D5.

Claim 7: Difference between the "state of the art" (D1 and D5) and the inventive concept (*Sanofi* - step 3) and whether it would have been obvious (*Sanofi* - step 4)

[74] As determined earlier, the additional essential functionality in claim 7 is that the apparatus chooses a selected task by comparing possible choices.

[75] D5 discloses means for choosing a task within the distance threshold (e.g. paragraph 0028 - avoid repetitive triggering based on proximity or distance). But in D5 there is no choosing of a task based on a comparison of some characteristic of the tasks, such as the relative distances of the tasks from the user.

[76] The manner of choosing in claim 7 involves a comparison of some characteristic of the tasks (e.g. the distance of a task's location from the user's location), and is a type of prioritization of the tasks. Automatically prioritizing or comparing tasks is a known concept from D1 (column 7, lines 16-24; column 9, lines 55-66). The system in D1 will *allow the user to prioritize tasks to be accomplished according to a variety of criteria, including due dates, etc*, and allow a vehicle to determine pickup/drop-off points/locations by choosing based on the location of the vehicle.

[77] It would be very plain to the skilled person that it would be necessary to compare some aspect of the tasks, such as distances of the tasks' locations from the vehicle, in order to prioritize the tasks in D1. It would be a sensible approach for the skilled person to apply such a comparison to the choosing of tasks in the system of D5; applying this knowledge from D1 to the teachings of D5 would not have required inventiveness or ingenuity on the claim date. Therefore, claim 7 is obvious in view of D1 and D5.

Conclusion

[78] The Board finds that claims 1-3 and claims 5-6 would have been obvious to the skilled person in view of D5 on the claim date. Claim 4 would have been obvious to the skilled person in view of D3 and D5 on the claim date. Claim 7 would have been obvious in view of D1 and D5.

Obviousness - Further Observations

[79] Having reviewed the cited prior art and the claimed invention, the Board notes that various other combinations of these prior art references would also have rendered the claims obvious, although they are not explicitly argued in the SOR. For example, there are no differences between D4 and claim 6 (see anticipation analysis), therefore, claim 6 is also obvious in view of D4. Also, claim 4 is obvious in view of the combined teachings of D1 and D2.

[80] Although the conclusion of obviousness can be reached using different lines of analysis, it is not necessary to exhaustively cover alternate analyses. Furthermore, though valid, these alternate analyses were not presented to the Applicant and therefore have not been included in these reasons.

Recommendation

[81] The Board recommends that the rejection of the application be affirmed for non-compliance with subsection 28.2(1) of the *Patent Act* and section 28.3 of the *Patent Act*, as follows:

- a. Claims 1, 3, 5 and 6 were anticipated by D4 before the claim date;
- b. Claims 1, 2, 3 and 5 would have been obvious to the skilled person in view of D4. Claim 4 would have been obvious in view of D4 and D2 on the claim date.
- c. Claims 1-3 and claims 5-6 would have been obvious to the skilled person in view of D5 on the claim date. Claim 4 would have been obvious to the skilled person in view of D3 and D5 on the claim date. Claim 7 would have been obvious in view of D1 and D5.

[82] Accordingly, the Board recommends a refusal to grant a patent for this application.

P. Sabharwal
Member

A. Strong
Member

L. Matheson
Member

Decision

[83] I concur with the Patent Appeal Board's finding that the application does not comply with subsection 28.2(1) of the *Patent Act* and section 28.3 of the *Patent Act* and its recommendation that the application be refused in accordance with section 40 of the *Patent Act*.

[84] Accordingly, I refuse to grant a patent on this application. Under section 41 of the *Patent Act*, the Applicant has six months within which to appeal my decision to the Federal Court of Canada.

Sylvain Laporte
Commissioner of Patents

Dated at Gatineau, Quebec,
this 17 day of January, 2012