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# Datasheet for the decision of 4 May 2011

**Case Number:** T 2226/08 - 3.5.02

**Application Number:** 96904490.8

**Publication Number:** 0808492

**IPC:** G08G 1/123

**Language of the proceedings:** EN

**Title of invention:**
Method and apparatus for determining expected time of arrival

**Patentee:**
Sasial Vehicle Technologies Limited

**Opponents:**
01: Continental Automotive Switzerland AG
02: Continental Automotive GmbH

**Headword:**
-

**Relevant legal provisions:**
EPC Art. 56, 105, 123(2), 115

**Relevant legal provisions (EPC 1973):**
-

**Keyword:**
"Admissibility of late-filed requests - yes"
"Added subject-matter - yes (auxiliary request III)"
"Inventive step - no (all other requests)"

**Decisions cited:**
T 0571/06

**Catchword:**
-

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Beschwerdekammern | Boards of Appeal | Chambres de recours

**Case Number:** T 2226/08 **-** 3.5.02

# D E C I S I O N
**of the Technical Board of Appeal 3.5.02**
**of 4 May 2011**

| | |
|---|---|
| **Appellant**: (Opponent 01) | Continental Automotive Switzerland AG<br>Industrieplatz 3<br>CH-8212 Neuhausen am Rheinfall (CH) |
| **Representative**: | Bonn, Roman Klemens<br>Continental Automotive GmbH<br>Patente und Lizenzen<br>Postfach 22 16 39<br>D-80506 München (DE) |
| **Intervening Party**: (Opponent 02) | Continental Automotive GmbH<br>Postfach 22 16 39<br>D-80506 München (DE) |
| **Representative**: | - |
| **Respondent**: (Patent Proprietor) | Sasial Vehicle Technologies Limited<br>Foundation Building<br>36 Griva Digeni Avenue<br>CY-1066 Nicosa (CY) |
| **Representative**: | Harguth, Alexander<br>Fish & Richardson P.C.<br>Highlight Towers<br>Mies-van-der-Rohe-Straße 8<br>D-80807 München (DE) |
| **Decision under appeal:** | **Decision of the Opposition Division of the European Patent Office posted 26 September 2008 rejecting the opposition filed against European patent No. 0808492 pursuant to Article 101(2) EPC.** |

**Composition of the Board:**

**Chairman:** M. Ruggiu
**Members:** M. Rognoni
P. Mühlens

## Summary of Facts and Submissions

I. The opponent 01 (appellant) filed an appeal against the decision of the opposition division rejecting the opposition against European Patent No. 0 808 492.

II. In the contested decision, the opposition division referred in particular to the following prior art:

D3: DE-A1-41 23 632,
D4: US-A-5 243 529,
D8: US-A- 4 153 874.

The opposition division essentially argued that, by combining the teachings of D3 and D8, the skilled person would arrive at a system for determining the expected time of arrival (ETA) in a mobile unit on a vehicle which used the distance to the destination and the estimated (by the driver) average speed to calculate the ETA. However, in order to arrive at a mobile unit which determined the expected time of arrival of the vehicle at the destination identified by the destination information in response to the vehicle position, the skilled person would have to make an extra step away from the teaching of D8. Hence, the subject-matter of claim 1 as granted involved an inventive step with respect to the combination of D3 and D8.

D4 disclosed a navigation apparatus which stored destination information generated by a dispatch and transmitted to a mobile unit (the navigation apparatus) on a vehicle. This information also included the scheduled arrival time. Moreover, the mobile unit

determined the vehicle's position and displayed it. D4, however, did not disclose or even hint at the calculation of the ETA in the mobile unit. It merely calculated its position and displayed it in relation to the destination having the scheduled arrival time closest to the present time.
Starting from D4, the person skilled in the art would not be motivated to combine D4 with D8 in order to calculate the ETA at a destination. Even in the light of this combination, the skilled person would only come to a solution where the ETA was calculated on the basis of a distance to a destination and not of the vehicle's position.

Hence, the subject-matter of claim 1 of the contested patent was inventive over D4 combined with D8.

III. With a letter dated 25 February 2009, the opponent 02 and assumed infringer filed a notice of intervention pursuant to Article 105 EPC.

IV. In reply to a communication from the Board summoning the parties to oral proceedings, the respondent (patent proprietor) filed, with a letter dated 27 September 2010, a new main request and auxiliary requests I to VIII.

V. At the oral proceedings, which were held on 27 October 2010, the Board first considered the respondent's request to reject the appeal as inadmissible. Having decided that the appeal was admissible, the Board then discussed with the parties the main request and auxiliary requests I to IV filed with the letter of 27 September 2010. After deliberation, the Board

indicated that the subject-matter of those requests was not patentable.

In view of the duration of the discussion and of the fact that there were still four auxiliary requests on file, the Chairman adjourned the oral proceedings to a later date.

VI. With a letter dated 23 December 2010, the respondent filed new auxiliary requests V, Va, VI and VII.

VII. On 4 May 2011, the oral proceedings were resumed. In the course of these proceedings, the respondent withdrew the auxiliary request VII filed with the letter of 23 December 2010 and the auxiliary request VIII filed with the letter dated 27 September 2010.

VIII. The appellant (opponent 01) requested that the decision under appeal be set aside and that the patent be revoked.

The respondent requested that the patent be maintained in amended form on the basis of the main request or one of the auxiliary requests I to IV filed with letter of 27 September 2010, or on the basis of one of the auxiliary requests V, Va and VI filed with letter of 23 December 2010.

IX. Claim 1 according to the main request reads as follows:

"A system (10) for determining an expected time of arrival of a vehicle (40) equipped with a mobile unit (42), comprising:

a dispatch (20) remotely located from the vehicle (40), the dispatch (20) operable to generate destination information for the vehicle (40), the destination information specifying at least one destination;
a communications link (30) coupled to the dispatch (20), the communications link operable to receive the destination information for the vehicle (40) from the dispatch (20); and
the mobile unit (42) coupled to the communications link (30),
the mobile unit (42) operable to receive from the communications link the destination information for the vehicle (40) generated by the dispatch (20),
the mobile unit further operable to determine a vehicle position,
the mobile unit (42) further operable to determine in response to the vehicle position the expected time of arrival of the vehicle (40) at the destination identified by the destination information."

Claims 2 to 21 and 32 are dependent on claim 1.

Claim 22 reads as follows:

"A method for determining an expected time of arrival of a vehicle (40), comprising:
generating destination information at a dispatch (20) remotely located from the vehicle (40), the destination information specifying at least one destination;
transmitting the destination information to the vehicle (40);
determining at the vehicle (40) the vehicle position; and

determining at the vehicle (40) in response to the vehicle position the expected time of arrival of the vehicle at the destination identified by the destination information."

Claims 23 to 31 and 33 are dependent on claim 22.

Claim 1 according to the auxiliary request I differs from claim 1 according to the main request in that it further comprises the following feature:

"wherein the vehicle is a car or a truck".

Thus, the first two lines of claim 1 read as follows:

"A system (10) for determining an expected time of arrival of a vehicle (40) equipped with a mobile unit (42), wherein the vehicle is a car or a truck, comprising: ..."

Claim 22 according to auxiliary request I differs from claim 22 of the main request in that the step of transmitting the destination information reads as follows:

"transmitting the destination information to a mobile unit (42) on the vehicle (40), wherein the vehicle is a car or a truck".

Claim 1 according to the auxiliary request II differs from claim 1 of the main request in that it further comprises the following feature:

"the mobile unit further operable to calculate an actual road distance using way points as intermediate points between the position of the vehicle (40) and the destination, the way points being generated locally at the mobile unit,"

Furthermore, the last feature of claim 1 reads as follows:

"the mobile unit (42) further operable to determine, in response to the vehicle position and using the way points, the expected time of arrival of the vehicle (40) at the destination identified by the destination information" (underlining added).

Similarly, claim 22 according to the auxiliary request II further comprises the following step:

"calculating an actual road distance using way points as intermediate points between the position of vehicle (40) and the destination, the way points being generated locally at the mobile unit".

Furthermore, the last step of claim 22 reads as follows:

"determining at the vehicle (40), in response to the vehicle position and using the way points, the expected time of arrival of the vehicle at the destination identified by the destination information" (underlining added).

Claim 1 according to the auxiliary request III differs from claim 1 of the main request in that it further comprises the following feature:

"the mobile unit comprising a database operable to store routing information, the mobile unit comprising a processor operable to generate a predetermined route for the vehicle to travel to the destination in response to the routing information stored in the database".

Furthermore, the last feature of claim 1 reads as follows:

"operable to determine, in response to the vehicle position and the routing information, the expected time of arrival of the vehicle (40) at the destination identified by the destination information" (underlining added).

Claim 20 reads as follows:

"An apparatus for a vehicle (40) for determining an expected time of arrival of the vehicle, comprising:
a communications device (90), operable to receive destination information from a dispatch (20) remotely located from the vehicle (40), the destination information specifying at least one destination;
a positioning device (80), operable to determine a vehicle position;
a database operable to store routing information; and
a processor (100) coupled to the communications device and the positioning device,

the processor (100) operable to receive destination information from the communications device and the vehicle position from the positioning device,
the processor (100) operable to generate a predetermined route for the vehicle (40) to travel to the destination in response to the routing information stored in the database,
the processor (100) further operable to determine, in response to the vehicle position and the routing information, the expected time of arrival of the vehicle (40) at the destination identified by the destination information."

Similarly, the method according to claim 31 further comprises the step of:

"generating a predetermined route for the vehicle to travel to the destination in response to routing information stored in a database of the mobile unit".

Furthermore, the last step of claim 31 reads as follows:

"determining at the vehicle (40), in response to the vehicle position and the routing information, the expected time of arrival of the vehicle at the destination identified by the destination information" (underlining added).

Claim 1 according to the auxiliary request IV differs from claim 1 of the main request in that:

"the mobile unit further operable to determine a vehicle position and to transmit the vehicle position to the dispatch" (emphasis added).

Similarly, the method claim 22 further comprises the following step:

"transmitting the vehicle position to the dispatch".

Claim 1 according to the auxiliary request V differs from claim 1 of the main request in that it further comprises the following feature:

"the dispatch (20) further operable to update the destination information when receiving late information from mobile unit (42) through communications link (30)".

Similarly, claim 22 according to the auxiliary request V further comprises the following feature:

"the method further provides for updating the destination information when receiving late information from the vehicle (40)".

Claim 1 of the auxiliary request Va, which comprises only two method claims, reads as follows:

"A method for determining an expected time of arrival of a vehicle (40), comprising:
generating destination information at a dispatch (20), the destination information specifies a plurality of destinations and a plurality of corresponding appointment times;

transmitting the destination information to the vehicle (40);
determining at the vehicle (40) the vehicle position;
determining at the vehicle (40) in response to the vehicle position the expected time of arrival of the vehicle at one or more of the destinations identified by the destination information;
determining at the vehicle (40) whether the expected time of arrival at one or more of the destinations is later than the corresponding appointment time; and
generating late information if the expected time of arrival at one or more destinations is later than the corresponding appointment time;
transmitting the late information to the dispatch (20);
generating updated destination information at the dispatch (20) in response to the late information; and
transmitting the updated destination information to the vehicle (40)."

The auxiliary request VI comprises only one independent system claim 1 and dependent claims 2 to 21.

Claim 1 according to the auxiliary request VI differs from claim 1 of the main request in that the destination information comprises "routing information". Hence, the first and the last features of this claim read as follows;

"a dispatch (20) remotely located from the vehicle (40), the dispatch (20) operable to generate destination information for the vehicle (40), the destination information specifying at least one destination and comprising routing information, the

routing information specifying a predetermined route for the vehicle (40) to travel to the destination;"

"the mobile unit (42) further operable to determine, in response to the vehicle position and to the routing information, the expected time of arrival of the vehicle (40) at the destination identified by the destination information."

X. The appellant's arguments relevant to the decision may be summarized as follows:

*Admissibility of the appeal*

The statement of grounds of appeal mentioned opponent 01 and bore the signature of one of their representatives. Hence, the appeal was admissible.

*Main request*

Figure 2 of document D4 showed a block diagram of a vehicular navigation apparatus which comprised a controller 27, a GPS receiver, a CD-ROM driver for a CD-ROM database and a CRT 25. According to column 5, lines 20 to 22, the navigation apparatus could also comprise a radio receiver to receive schedule data from a remote place on a real-time basis. As shown in Figure 3, destination information comprised the name of the destination, its coordinates and the scheduled time of arrival. Instructions on a destination sent from headquarters were automatically displayed on a map (column, 5, lines 22 to 26). The displayed map information included the distance of the vehicle to the location of the destination (see Figure 1). Although D4

did not explicitly refer to the expected time of arrival at a given destination, it was evident to a skilled person that a system which already provided the current position and the distance to a destination could also be made operable to determine the expected time of arrival at that destination. In this respect, it should be noted that the contested patent did not specify how the expected time of arrival should be calculated in response to the vehicle's current position.

Furthermore, D8 pointed out in column 1, lines 27 to 31 that a need existed for an instrument which could continuously apprise the traveller of his estimated time of arrival at a desired destination. Consequently, D8 showed a mobile unit which operated to compute the estimated time of arrival of a vehicle at a desired destination based upon the vehicle's actual speed and the travelled distance.

As it would have been obvious to a person skilled in the art to improve the functionality of the apparatus and the method known from D4 by applying the teaching of D8, the subject-matter of claims 1 and 22 did not involve an inventive step within the meaning of Article 56 EPC.

*Auxiliary request I*

The first auxiliary request differed from the main request only in that the vehicle was a car or a truck. As this feature was anticipated by D4 (column 1, second paragraph), the reasons for the lack of inventive step

of the main request applied also to the auxiliary request I.

*Auxiliary request II*

According to claims 1 and 22 of the auxiliary request II, way points were used to calculate an actual road distance. The contested patent, however, did not specify how these way points were "generated" or how the "actual" distance to a destination was to be determined using such way points. In fact, the term "way points generated by the mobile unit" within the context of the patent in suit could apply to intermediate locations on a destination schedule which were uploaded to the mobile unit and thus made available to the driver.

The schedule data according to Figure 3 of D4 comprised a plurality of locations stored in the memory of a mobile unit. Intermediate locations on this schedule were "way points" on the way to the final destination. Furthermore, Figure 1 of D4 showed a road network. It was generally known that intermediate way points were required to identify a particular route in a road network and thus correctly determine the travelled distance to a given destination. In fact, this was the way any navigation system worked.

Thus, the subject-matter of claims 1 and 22 resulted from an obvious combination of the teachings of D4 and D8 with the skilled person's general knowledge (Article 56 EPC).

*Auxiliary request III*

A system comprising the features which distinguished claim 1 of the auxiliary request III from the main request was originally disclosed in claim 18, dependent on claim 14. According to the latter, however, destination information generated at the dispatch and received by the mobile unit specified a first destination, a stationary interval at the first destination and a second destination. Furthermore, it was recited in claim 18 as originally filed that the mobile unit was operable to generate a predetermined route for the vehicle to travel to the second destination in response to the routing information stored in the database. As the system according to claim 1 of the auxiliary request III was no longer limited to a dispatch which generated a first destination, a stationary interval at the first destination and a second destination and to a mobile unit operable to generate a predetermined route for the vehicle to travel to the second destination, it violated Article 123 (2) EPC.

*Auxiliary request IV*

The feature which distinguished claim 1 and claim 22 according to the auxiliary request IV from the corresponding claims of the main request ("transmitting the vehicle position to the dispatch") had no interaction with the other features of the independent claims and, in particular, was not related to the problem of determining the ETA.

D4 was concerned with a system which, *inter alia,* determined the position of a vehicle. To the skilled person, wishing to make this system suitable for fleet management, it would have been obvious to make provisions for informing the dispatch about the vehicle's position. Furthermore, D3 showed that it was known to transmit this kind of information from a vehicle to a control centre.

Hence, the subject-matter of claims 1 and 22 resulted from an obvious combination of the teachings of D4 and D3.

*Admissibility of late-filed requests*

The auxiliary requests filed by the respondent with letter dated 23 December 2010 should not be admitted into appeal proceedings, in particular in view of the fact that the respondent had already had ample opportunity to file new requests. Furthermore, the new requests gave rise to new objections and might further delay the appeal proceedings.

*Auxiliary request V*

The auxiliary request V differed from the main request in that the dispatch updated the destination information when receiving late information from the mobile unit through the communications link.

D4 foresaw the possibility of sending destination information on a real time basis from the dispatch to a mobile unit. This information comprised a plurality of

destinations and corresponding scheduled times of arrival.
D3 disclosed a system for fleet management which comprised a bidirectional communications link which could be used to exchange a plurality of data between a vehicle and its control centre. It was implicit for the skilled reader that such data could include late information and an updated schedule. It would have been obvious to a person skilled in the art, wishing to make the system of D4 suitable for fleet management, to rely on the teaching of D3 and thus arrive at the claimed system (Article 56 EPC).

*Auxiliary request Va*

The method according to claim 1 of the auxiliary request Va differed from the disclosure in D4 in that the expected time of arrival at one or more of the destinations was determined, late information was generated and transmitted to the dispatch and, in response to such late information, updated destination information was generated and transmitted from the dispatch to the vehicle.

As shown for the main request, adding to the known system the functionality of determining the expected time of arrival did not involve an inventive step. It was also obvious to a skilled person that efficient fleet management presupposed an exchange of information between the mobile unit and the dispatch. D3 pointed out that it was known to establish a bidirectional communications link between a control centre and the vehicles. On the other hand, it was essentially an administrative choice, which as such could not support

an inventive step, to decide what kind of information was to be exchanged between the control centre and a vehicle in order to manage effectively a fleet of vehicles. In any case, it would have been obvious to the skilled person to use the ETA at a given destination to establish whether a vehicle would arrive late at that destination and, in case of delay, to update the vehicle's schedule. Hence, in the light of the disclosure in D4 and D3 and of the skilled person's general knowledge, the method according to claim 1 did not involve an inventive step (Article 56 EPC).

*Auxiliary request VI*

According to the application as originally filed, intermediate locations on the way to a final destination constituted routing information. Hence, the plurality of scheduled destinations stored in the mobile unit known from D4 represented routing information as recited in claim 1 of the auxiliary request VI. D4 taught that the mobile unit could receive schedule data from the control centre, whereby the schedule data specified a list of destinations to be travelled to in a given order. As the ETA at a certain destination depended also on the vehicle's schedule, it would have been obvious to a person skilled in art to take into account the schedule data, *i.e.* the routing information, provided by the dispatch when determining the ETA. Hence, the subject-matter of claim 1 did not involve an inventive step (Article 56 EPC).

XI. The respondent's arguments relevant to the decision may be summarized as follows:

*Admissibility of the appeal*

No statement of grounds of appeal had been validly filed in the name of the opponent 01. Therefore, the appeal was not admissible.

*Main request*

Important aspects of the present invention were the generation of destination information at a dispatch and the determination by the mobile unit of the expected time of arrival at a destination. In fact, all important data concerning fleet management and, in particular, destination information were gathered and generated centrally at the dispatch. From there, destination information was transmitted to the different vehicles and processed by the respective mobile units. In other words, the distinguishing feature of the present invention was that the vehicle position and the expected time of arrival were determined locally at the vehicle, whereas destination information was centrally controlled by the dispatch. This particular combination of features provided certain advantages which had been recognised by the inventors and which allowed an efficient fleet management on-the-fly.

In document D3 it was not clear what kind of information was exchanged between vehicles and a control centre. It was also not clear where the expected time of arrival was generated.

D4 was not concerned with determining the expected time of arrival. Furthermore, the system of D4 merely stored a list of destinations and could not guide to a particular destination. In fact, its algorithm could only determine whether the time scheduled for reaching a certain destination had been passed or not.

Starting from D4, the problem solved by the present invention could be defined as improving the functionality of the known system and providing an alternative navigation system.

Even assuming that the skilled person would consider D8 as relevant prior art and thus apply its teaching to the system of D4, this person would not arrive at the system of the invention simply because D8 offered a completely different approach to calculating the expected time of arrival.

In summary, the teaching of D4 did not require the determination of the expected time of arrival at a destination and there was no reason to extend the functionality of the corresponding system. But even if it were assumed that the skilled person would have wished to add to the known system means for estimating the time of arrival, such person would not have arrived at the claimed subject-matter because the cited prior art did not calculate the ETA in response to the vehicle position as determined at the mobile unit.

Hence, the system according to claim 1 and the corresponding method according to claim 22 involved an inventive step within the meaning of Article 56 EPC.

*Auxiliary request I*

The same arguments in favour of the main request apply also to the independent claims of the auxiliary request I. Furthermore, this request specified that the vehicle was a car or truck, whereas documents D4 and D8 referred in general to a vehicle.

*Auxiliary request II*

It was disclosed in the application as originally filed that way points were generated locally and that this served the purpose of improving the calculation of the actual road distance. In fact, way points improved the calculation of the expected time of arrival. As none of the prior art documents related to a mobile unit which generated way points locally and used them as intermediate points in the calculation of the road distance between the vehicle position and a destination, the claimed system and method involved an inventive step within the meaning of Article 56 EPC.

*Auxiliary request III*

The subject-matter of claim 1 according to the auxiliary request III found support in the apparatus claim 32, dependent on claim 23, of the application as originally filed. The person skilled in the art realized that the features of claim 32 could be combined with the system according to claim 1. Moreover, it was clearly disclosed in the application documents that routing information was used for calculating the expected time of arrival. Thus, claim 1

did not contain subject-matter which extended beyond the content of the application as originally filed (Article 123 (2) EPC).

*Auxiliary request IV*

The feature which distinguished the independent claims of the auxiliary request IV from the corresponding claims of the main request, *i.e.* the transmission of vehicle position to the dispatch, was particularly relevant to fleet management as it improved the coordination and control of vehicles.

D4 was not concerned with fleet management and merely hinted at the possibility of establishing a unidirectional data transmission from a central unit to a vehicle. As this document gave the skilled person no incentive to provide a system which sent the vehicle position to the dispatch, there would have been no reason to apply the teaching of D3 to the system of D4. Moreover, the combination of D3 and D4 would not have led the skilled person to the claimed invention because it would not have been obvious to take the further step of selecting the vehicle position as the particular kind of information to be sent from the mobile unit to the dispatch.

Hence, the subject-matter of claims 1 and 22 involved an inventive step (Article 56 EPC).

*Admissibility of late-filed requests*

The new auxiliary requests V and VI were based on former auxiliary requests VII and V, respectively. The

auxiliary request Va contained only two claims and was directed to overcoming all outstanding objections. All requests were clearly supported by the original application and were meant to focus the discussion on some essential aspects of the invention.

Hence, these requests should be admitted into the proceedings.

*Auxiliary request V*

The system according to claim 1 of the auxiliary request V differed from D4 essentially in that the mobile unit was operable to determine the ETA of the vehicle at the destination identified by the destination information and in that the dispatch was operable to update the destination information when receiving late information from the mobile unit through the communications link. D4 related to a closed system with an optional communications link from a control centre to the mobile unit located on a vehicle but no data transmission from the mobile unit to the control centre. Even under the assumption that the skilled person could have applied the teaching of D8 relating to the calculation of the ETA to the system of D4, such person would not have taken the additional steps of generating late information, transmitting it to the dispatch and updating the destination information before sending it from the dispatch to the mobile unit. In fact, although D3 referred in general to the possibility of a bidirectional communication between a control centre and a mobile unit, it was not concerned with the generation of late information at the mobile unit.

As the cited prior art documents did not suggest the combination of features recited in claims 1 and 22 of the auxiliary request V, the subject-matter of these claims involved an inventive step (Article 56 EPC).

*Auxiliary request Va*

The method according to claim 1 of the auxiliary request Va clearly expressed the link between two aspects of the present invention which were essential to fleet management: the determination of the expected time of arrival and the updating of the destination information in response to the reception of late information at the dispatch. Late information was generated if the ETA at one or more of the destinations was later than the corresponding scheduled time of arrival. The late information was transmitted to the dispatch which then generated updated destination information and sent it to the vehicle's mobile unit. As the claimed method made it possible to update a vehicle's destination schedule as soon as a delay in meeting the destination schedule was detected, it provided for efficient and flexible fleet management.

D4 was primarily concerned with the problem of reducing a driver's burden and thus disclosed a navigation apparatus which supported the driver by sequentially displaying the destinations of a sightseeing tour and their scheduled arrival times. D4 did not foresee any data transmission from the vehicle to the control centre.

D3 disclosed a two-way communications link between a vehicle and a control centre but did not suggest sending updated destination information from the dispatch to the vehicle in response to late information received at the dispatch.

Even if it were assumed that the skilled person could have combined the method of D4 with the teachings of D8 and D3, there was no evidence in the prior art that such person would have actually done so. In any case, it was evident that the alleged combination of these three prior art documents would not have led to the present invention, in particular in view of the fact that, as stipulated in case T 0571/06 decided by Board 3.5.02, it was sufficient to have a single step in the claimed method which did not follow in an obvious manner from the prior art to satisfy the requirement of Article 56 EPC.

Hence, the claimed method involved an inventive step within the meaning of Article 56 EPC.

*Auxiliary request VI*

In the system according to claim 1 of the auxiliary request VI, the destination information generated by the dispatch comprised also routing information, *i.e.* the actual road to be travelled by the vehicle. By assigning to the vehicles not just a list of destinations but also corresponding routes, the dispatch had a more direct control over the operation of its fleet vehicles. Furthermore, as the ETA was determined in response to the vehicle position and

routing information, it allowed a more precise evaluation of the time of arrival at a destination.

The system of D4 was not concerned with managing the actual route travelled by a vehicle and only specified a list of destinations. In fact, there was no suggestion in the available prior art that specifying a destination schedule and a corresponding route to be travelled would render fleet management more efficient and flexible.

In summary, it would not have been obvious to a skilled person starting from D4 to arrive at the subject-matter of claim 1 (Article 56 EPC).

XII. Furthermore, at different stages in the course of the appeal proceedings, observations were presented by a third party under Article 115 EPC.

## Reasons for the Decision

1. *Admissibility of the appeal and of the notice of intervention*

1.1.1 The patent proprietor has essentially argued that the statement of grounds of appeal dated 4 February 2009 and signed by Dr. Richter was filed under the letterhead of "Continental Automotive GmbH", the alleged opponent 02. As the patent attorney did not indicate that he was acting on behalf of "Continental Automotive Switzerland AG", the opponent 01 ("Continental Automotive Switzerland AG") did not file

any statement of grounds of appeal and thus the appeal was not admissible.

1.1.2 As the appeal of the opponent 01 was not admissible, also the notice of intervention of the opponent 02 was not admissible.

1.2.1 According to the appellant, all the parties involved and the EPO could derive from the statement of grounds appeal that the latter related to the appeal "T2226/08" concerning as "patent proprietor" "Sasial-Vehicle Technologies Limited" and as "opponent" "Continental Automotive Switzerland AG", whereby the opponent appellant was represented by "Dr. Jürgen Richter" as "European Patent Attorney".

1.2.2 Hence, the opponent 01 had fulfilled the requirements for the admissibility of the present appeal.

1.3.1 Having considered the parties' arguments and the particular circumstances of the present case, the Board has no doubt that, when filing an appeal against the decision of the opposition division to reject the opposition of "Continental Automotive Switzerland AG", the undersigned, Dr. Jürgen Richter European Patent Attorney, was representing the opponent 01. In fact, "Continental Automotive Switzerland AG" had filed on 25 November 2008 an authorisation dated 12 November 2008 indicating Dr. Jürgen Richter as one of its representatives.

1.3.2 Hence, the appeal filed with notice of appeal dated 12 November 2008 and the notice of intervention dated 25 February 2009 are admissible.

2. *Main request*

2.1.1 Claim 1 of the main request, which relates to a *"system"* for determining an expected time of arrival of a vehicle equipped with a *"mobile unit"*, corresponds to claim 1 of the contested patent.

2.2.1 D4, which is considered to represent the closest prior art, is concerned with "*a navigation apparatus which stores movement schedule data necessary to reach scheduled destinations and displays the next destination together with the own present position, to reduce a driver's burden and to effectively support his drive*" (D4, column 1, lines 38 to 43).

2.2.2 As shown in Figure 2 and specified in column 2, line 32 to column 3, line 2, the apparatus according to D4 comprises a GPS receiver 20 for determining the current position of a vehicle and a controller 27 which includes a microprocessor unit for performing data processing, an interface *"used for data communication with external systems"* and a non-volatile RAM for storing schedule data.

Furthermore, *"a radio receiver may be provided in the navigation apparatus to receive the schedule data from a remote place on a real-time basis. In this case, the invention can be applied to a system in which instructions on a destination sent from headquarters are automatically displayed on a map and a driver moves toward the destination being displayed"* (D4, column 5, lines 20 to 26 - underlining added).

2.2.3 Hence, D4 discloses, *inter alia,* a system comprising the following features expressed in the language of claim 1 of the main request:

– a dispatch remotely located from the vehicle, the dispatch operable to generate destination information for the vehicle, the destination information specifying at least one destination (cf. *"headquarters",* D4, column 5, lines 20 to 26);

– a communications link coupled to the dispatch, the communications link operable to receive the destination information for the vehicle from the dispatch (cf. *"radio receiver"* and *"headquarters"*, D4, column 5, lines 20 to 26);

– the mobile unit coupled to the communications link, the mobile unit operable to receive from the communications link the destination information for the vehicle generated by the dispatch (cf. *"interface"*, column 2, lines 65 to 67, *"radio receiver"* and *"headquarters"* (column 5, lines 20 to 26);

– the mobile unit further operable to determine a vehicle position (*"GPS receiver"*, column 2, lines 34 to 36).

2.3.1 The mobile unit according to D4 operates essentially as follows (see D4, Figure 4):

– the controller 27 first judges whether the stored schedule is one for today based on its year/month/date information,

– if the judgement is affirmative, destination information located at the first position of the stored data is accessed,

– the controller obtains the scheduled arrival time of the accessed destination information and compares it with the present time,

– if the present time has passed the arrival time, the controller judges whether the vehicle has already reached the destination,

– if the scheduled arrival time has not been passed yet, or it has been passed but the destination has not been reached yet, the destination information having the scheduled arrival time closest to the present time is displayed.

2.3.2 The process of displaying the destination information is as follows (cf. D4, Figure 5 and column 4, lines 20 to 38):

– the controller obtains the coordinate information of the destination having the scheduled arrival time closest to the present time and judges whether the coordinates are located within the map being displayed,

– if the judgement is affirmative, the controller displays a destination mark, scheduled arrival time and destination name on the map,

– if the judgement is negative, the controller displays an arrow indicating the calculated direction at the tip of the mark indicating the present position and displays the calculated distance to the destination, the scheduled arrival time and the destination name on the map.

2.3.3 Furthermore, since "*the above operation is performed at predetermined intervals, the display of the direction indicating arrow and the distance is continuously renewed until a map including the destination is displayed, and the arrow always points to the destination in spite of a change of the present position*" (D4, column 4, lines 39 to 44 - underlining added).

2.3.4 In summary, the mobile unit shown in D4 is operable to determine, in response to the vehicle position, the distance to the destination identified by the destination information. However, it does not give an estimate of the time of arrival.

2.3.5 Hence, the subject-matter of claim 1 according to the main request differs from the system disclosed in D4 in that:

– *"the mobile unit (42) further operable to determine in response to the vehicle position the expected time of arrival of the vehicle (40) at the destination identified by the destination information".*

2.4.1 Starting from D4, a problem addressed in the contested patent and solved according to the system of claim 1 of

the respondent's main request can be seen in improving the functionality of the known system by providing additional information to the driver.

2.4.2 It is pointed out in D4 that "*where a moving body such as an automobile is frequently used, its movement schedule may be prepared which includes destinations and scheduled arrival times at the respective destinations. In particular in delivery companies or the like, when one person is required to go to many destinations in a day, a movement schedule is prepared considering an order of visiting destinations, necessary arrival times, etc. and he moves according to the prepared schedule, to make an efficient delivery work*" (column 1, lines 15 to 24).

2.4.3 There can be no doubt that a driver who works for a delivery company and thus has to follow a movement schedule including destinations and scheduled arrival times at the respective destinations would find it helpful to be informed if he/she can expect to reach the next scheduled destination on time, *i.e.* to know the expected time of arrival (ETA) at the next destination.

2.4.4 In fact, as specified in D8 (column 1, lines 24 to 31), individuals "*whose livelihood depends on travel, such as salesman and the like, have become concerned over the increased times required for commuting. For these persons, as well as others whose presence is required at a certain place at a certain time, the need exists for an instrument which can continuously aprise [sic] the traveler of his estimated time of arrival at a desired destination*" (underlining added).

2.4.5 The respondent has essentially objected that D8 was not relevant to the present case because it did not teach to calculate the ETA in response to the vehicle position. In D8, only a remaining distance was calculated by subtracting the actual measured distance covered by the vehicle from the total distance input by the traveller. Thus, D8 worked merely on the distance covered by the vehicle and would give a wrong result if the vehicle travelled in the wrong direction.

2.4.6 The Board acknowledges that D8 does not calculate the vehicle's ETA at a given destination in response to the vehicle's actual position as determined by its mobile unit. D8 is, however, relevant to the present case inasmuch as it provides evidence that at its publication date in 1979, *i.e.* several years before the priority date of the contested patent, it was known that there was a need for a mobile unit which gave a driver an estimate of his/her time of arrival at a predetermined destination.

2.4.7 As the system disclosed in D4 calculates the distance to a destination in response to the vehicle's actual position and repeats these calculations at predetermined intervals (cf. D4, column 4, lines 39 to 44), it generates all the information required for determining the velocity of approach to the destination and thus for estimating the vehicle's time of arrival.

In this respect, it is observed that the claimed invention does not rely on any particular algorithm for determining the ETA.

2.5.1 In the face of an evident desire, as expressed in D8, for an apparatus which informed the driver of a vehicle about the expected time of arrival at a predetermined destination, it was obvious to a person skilled in the art, starting from D4 and wishing to increase the functionality of the known system, to make the controller 27 of the mobile unit operable to determine and display, in response to the vehicle's position, the ETA at the destination identified by the destination information.

2.5.2 The same applies to the method according to claim 22 which comprises steps essentially corresponding to the functions performed by the features of claim 1.

2.5.3 Hence, the subject-matter of claims 1 and 22 according to the respondent's main request does not involve an inventive step within the meaning of Article 56 EPC.

3. *Auxiliary request I*

3.1.1 Claims 1 and 22 according to the auxiliary request I differ from the corresponding claims of the main request in that *"the vehicle is a car or a truck"*.

3.2.1 D4 (column 1, first paragraph) specifies that the "*present invention relates to a navigation apparatus which, to support a drive of a moving body such as an automobile, displays a map and superimposes a present position of the moving body on the map*" (emphasis added).

3.2.2 Thus, the feature that *"the vehicle is a car or a truck"* does not further distinguish the system

according to claim 1 or the method according to claim 22 from the disclosure in D4.

3.2.3 For the same reasons given with respect to the main request, the subject-matter of claims 1 and 22 of the auxiliary request I does not involve an inventive step within the meaning of Article 56 EPC.

4. *Auxiliary request II*

4.1.1 The subject-matter of claim 1 according to the auxiliary request II differs from the system of D4 in that it further comprises the following feature:

– "*the mobile unit further operable to calculate an actual road distance using way points as intermediate points between the position of the vehicle (40) and the destination, the way points being generated locally at the mobile unit*".

4.2.1 A first question to be addressed when considering the patentability of the claims amended according to the respondent's auxiliary request II is the actual meaning of *"way points"* in the context of the patent.

4.2.2 The term *"way points"* occurs only in the following paragraphs of the published patent (underlining added):

[0044] "*A problem that trucking companies have often faced is that operators of trucks, either intentionally or unintentionally, drive considerable distances from their assigned routes. Because trucking companies must pay for the additional fuel and maintenance expenses*

*associated with the increased mileage, these out-of-route miles are extremely costly to trucking companies. To alleviate this problem, destinations C and D may be used as way points to determine whether the operator of vehicle 40 has driven out of route 52a specified in the destination information generated by dispatch 20. Referring to FIG. 2, dispatch 20 generates destination information specifying that vehicle 40 is to proceed to destination E along route 52a, thus passing through way points C and D.*

[0045] *Mobile unit 42 may be configured to update dispatch 20 when vehicle 40 has reached a way point. In this way, dispatch 20 may be notified that vehicle 40 is still in route. Suppose, however, that instead of following route 52a specified by the destination information, the operator of vehicle 40 drives along route 52b passing through points C' and D'. Based upon the position information received from positioning system 45 and the destination information received from dispatch 20, mobile unit 42 determines that the expected time of arrival of vehicle 40 at way point C will be later than the corresponding appointment time. This will occur at some point along the path between A and C', and most likely at the beginning of the path near A. Therefore, shortly after vehicle 40 takes the wrong route, mobile unit 42 generates late information, including the position of vehicle 40, to inform dispatch 20 and the operator of vehicle 40 of the out-of-route condition. Regardless of the operator's intentions, he may now correct his*

*route in order to minimize the out-of-route mileage. At this point, dispatch 20 may update the destination information for mobile unit 42".*

[0046] *"Besides reducing out-of-route mileage, the use of intermediate way points improves the calculation of expected time of arrival. Specifically, the actual distance between the position of vehicle 40 and the destination may not be the road distance. Way points may be used as intermediate points between the position of vehicle 40 and the destination in order to more accurately calculate actual road distance. If used for more accurate distance calculation, way points do not need an associated appointment time and mobile unit 42 need not calculate an expected time of arrival at these way points. Way points may be generated locally at mobile unit 42 using, for example, routing software or databases".*

4.2.3 In summary, way points may be intermediate locations between two destinations or intermediate points used to identify the actual road to the next scheduled destination. As acknowledged by the respondent, intersections and crossroads would also represent way points within the meaning of the present invention.

Furthermore, the contested patent specifies that way points may be generated locally using *"routing software or databases"*.

4.3.1 The navigation apparatus known from D4 (see column 2, lines 40 to 43) comprises a database of map information which is displayed together with a mark indicating the

vehicle's current position. As shown in Figures 1A and 1B, the map information includes roads, intersections and crossroads which together define a road network.

4.3.2 There can be no doubt that D4 uses the vehicle position and the coordinates of a destination when calculating the distance to be travelled. However, this prior art document does not specify whether the actual road distance or the straight line distance is actually calculated.

4.4.1 Starting from the teaching of D4, a problem addressed in the contested patent and solved by the subject-matter of claim 1 may be seen in providing a system which offers more accurate information to the user.

4.4.2 It is self-evident that the actual road distance between a vehicle's position and destination is a more useful parameter than the straight line distance and that a map database of a road network may provide all the information required to define the actual road to a given destination.

4.4.3 In the Board's opinion, it would be within the competence and expertise of a skilled practitioner to make the controller of a system according to D4 operable to calculate the road distance to a given destination by using crossroads and intersections stored in a map database as way points of the actual route between the vehicle's position and its destination.

4.4.4 As to how the way points are generated, the contested patent merely specifies that "*the way points are generated locally at mobile unit 42 using, for example, routing software or databases*" (see paragraph [0046]). This may imply that way points defining the road to a certain destination are previously stored in the mobile unit or that particular locations are identified as way points when their coordinates are entered by the user.

4.5.1 In the light of general knowledge common in the field of navigation systems, it was obvious to a person skilled in the art, starting from the teaching of D4 and wishing to improve the known system, to realize that an improved estimation of the distance to be travelled required a knowledge of the actually travelled road and that such road could be identified by specifying a number of way points. In doing so, the skilled person would have arrived at a system falling within the terms of claim 1.

4.5.2 Hence, the subject-matter of claim 1 and of the corresponding claim 22 does not involve an inventive with the meaning of Article 56 EPC.

5. *Auxiliary request III*

5.1.1 Claim 1 according to auxiliary request III differs from claim 1 according to the main request in that the *"mobile unit"* comprises the following features:

(a) "*a database operable to store routing information*",

(b) "*a processor operable to generate a predetermined route for the vehicle to travel to the destination in response to the routing information stored in the database*".

5.1.2 Furthermore, the mobile unit is operable to determine the expected time of arrival in response to the vehicle position *"and the routing information"*.

5.2.1 According to the respondent, the system claim and the method claim according to the auxiliary request III found support in claim 23 and in its dependent claim 32, as originally filed. Although the latter were directed to an *"apparatus on a vehicle"*, the skilled reader of the application documents would have realized that the features of the apparatus according to claim 32 could be combined with the features of a system or a method as recited in the original claims 1 or 36, respectively.

5.2.2. The appellant has contested that the respondent's request was supported by claims 23 and 32 and argued that only claim 14 and its dependent claim 18 disclosed the features which distinguished the auxiliary request III from the main request. In claim 14, however, the destination information specified *"first destination, a stationary interval at the first destination, and a second destination"*, and the mobile unit was *"operable to determine in response to the vehicle position and the stationary interval the expected time of arrival of the vehicle at the second destination"* (emphasis added).

5.3.1 Claim 23 of the application as originally filed relates to an *"apparatus on a vehicle for determining an*

*expected time of arrival of the vehicle",* comprising the following features:

"*a communications device operable to receive destination information from a dispatch, the destination information specifying at least one destination;*

*a positioning device operable to determine a vehicle position; and*

*a processor coupled to the communications device and the positioning device, the processor operable to receive destination information from the communications device and the vehicle position from the positioning device, the processor further operable to determine in response to the vehicle position the expected time of arrival of the vehicle at the destination identified by the destination information*".

5.3.2 Claim 32 relates to the apparatus of claim 23 and recites that it further comprises:
*"a database operable to store routing information, the processor being further operable to generate a predetermined route for the vehicle to travel to the destination in response to the routing information stored in the database, the processor further operable to determine the expected time of arrival of the vehicle at the destination in response to the routing information".*

5.4.1 As it appears by comparing their wordings, claim 1 according to the auxiliary request III and claim 32 in combination with claim 23 as originally filed relate to different subject-matters. In particular, the "*apparatus*" of claim 23 comprises *"a communications*

*device",* a *"positioning device"* and a *"processor coupled to the communications device and the positioning device"*. On the other hand, claim 1 of the auxiliary request III specifies a *"system"* for determining an expected time of arrival of a vehicle equipped with *"a mobile unit"* which is coupled to a *"communications link"*, whereby the mobile unit is *"operable to receive from the communications link the destination information"* and *"to determine a vehicle position"* and further comprises *"a database"* and a *"processor"* which is operable to generate a predetermined route and to determine the expected time of arrival.

5.4.2 Hence, it is not immediately apparent that the *"apparatus"* according to claim 32 could correspond to the *"mobile unit"* recited in claim 1 of the auxiliary request III. Furthermore, there is no indication in the application as filed that the *"mobile unit"* of the claimed system could additionally comprise some selected features of the *"apparatus"*.

5.5.1 On the other hand, the Board agrees with the appellant that claims 14 and 18 disclose features (a) and (b) (see item 5.1.1) in the context of a system comprising a dispatch which generates destination information specifying a first destination, a stationary interval at the first destination and a second destination and where the mobile unit determines the ETA at the second destination in response to the vehicle position and the stationary interval.

5.5.2 Thus, even though all the features recited in claim 1 according to the auxiliary request III may appear to be

separately disclosed in the originally application, the particular combination of features now claimed cannot be derived directly and unambiguously from the application documents.

5.5.3 As claim 1 according to the auxiliary request III contains subject-matter which extends beyond the content of the application as filed, it offends against Article 123 (2) EPC.

6. *Auxiliary request IV*

6.1.1. Claim 1 according to the auxiliary request IV differs from claim 1 of the main request in that the mobile unit is further operable *"to transmit the vehicle position to the dispatch".*

6.2.1 Starting from D4, a problem addressed in the contested patent and solved by the subject-matter of claim 1 can be seen in improving the functionality of a system suitable for fleet management.

6.2.3 As pointed out above (see main request), the Board finds that it was obvious to a skilled person to make the mobile unit operable to determine, in response to the vehicle position, the ETA of the vehicle at the destination identified by the destination information.

6.3.1 Although D4 teaches that a radio receiver may be used to send schedule data from a remote place to the navigation apparatus, it does not foresee a two-way communications link for sending data from the mobile unit to the dispatch.

6.3.2 However, D3 (column 1, lines 5 to 15 and claim 1), which relates to a data transmission system for vehicles and mobile goods, points out that some delivery companies have radio stations at their headquarters to establish a bidirectional communications link with the drivers of their vehicles. Over this communications link, instructions, replies and other information can be exchanged. By means of such systems it is possible to speed up the delivery of goods and reduce journey time. In particular, the information exchanged between vehicles and headquarters can relate to the vehicle's current position, its starting location and destination, its scheduled and estimated times of arrival at a destination.

6.3.3. Although the detailed example referred to in D3 relates indeed to freight trains, it is specified in D3 (column 2, lines 30 to 39) that the disclosed information transmission system can be applied to land, sea and air freight traffic.

6.4.1 In the light of the teaching of D3, it was obvious to a person skilled in the art, starting from D4 and wishing to adapt the known system to the needs of shipping companies, to further improve its functionality by providing it with a two-way communications link and by making the mobile unit operable to transmit to headquarters any information available at the mobile unit, such as the vehicle's current position, and of interest for the management of a fleet of freight vehicles.

6.4.2 Hence, the subject-matter of claim 1 according to the respondent's auxiliary request IV does not involve an inventive step within the meaning of Article 56 EPC.

7. *Admissibility of the auxiliary requests V, Va, VI*

7.1.1 With a letter dated 23 December 2010 the respondent filed*, inter alia*, new auxiliary requests V, Va and VI.

7.2.1 Although the parties had been notified before the adjournment of the oral proceedings held on 27 October 2010 that no further written submissions would be accepted, the Board, taking notice that the new auxiliary requests were filed well in advance of the scheduled resumption of the oral proceedings and that dealing with their subject-matter would not impose an undue burden on the appellant or further delay the proceedings, exceptionally decided to depart from the established practice of admitting late-filed requests only if they *prima facie* overcome all outstanding objections and are likely to be allowable, and, in the exercise of its discretion under Article 13(1) RPBA, admitted the new auxiliary requests into the appeal proceedings.

8. *Auxiliary request V*

8.1.1 Claim 1 according to the auxiliary request V differs from claim 1 of the main request in that "*the dispatch (20) further operable to update the destination information when receiving late information from mobile unit (42) through communications link (30)*".

8.2.1 As shown in D3 (column 1, second paragraph), before the priority date of the contested patent shipping companies were used to relying on two-way communications links with their delivery vehicles in order to convey instructions to their drivers and exchange information. The skilled reader of this prior art document would understand that the term "instructions" (*"Weisungen"*) could also cover update destination information to be sent to the driver in response to receiving late information from the vehicle.

Furthermore, it seems reasonable to assume that the driver of a delivery vehicle, realizing that a predetermined schedule could not be met due to a delay, would wish to inform the control centre of the delivery company. Similarly, an operator at the company's headquarters would react to such information by updating the delivery schedule. In other words, the functionalities now provided by the system according to claim 1 and by the corresponding method of claim 22 essentially reflect actions that can be expected from a driver and a control centre of a shipping company.

8.2.2 Even if it is assumed that claim 1 and claim 22 imply an "automatic" transmission of late information from the mobile unit to the dispatch and the subsequent automatic update of the destination information, i.e. without human intervention, the mere automation of procedures relating to the management of a fleet of vehicles, which *per se* would be obvious to the staff of a shipping company, could not support an inventive step.

8.3.1 As the features which now distinguish claims 1 and 22 of the auxiliary request V from the corresponding

claims of the main request do not go beyond what constitutes standard fleet management, the subject-matter of these claims does not involve an inventive step within the meaning of Article 56 EPC.

9. *Auxiliary request Va*

9.1.1 Claim 1 according to the auxiliary request Va relates to a method and differs from claim 22 of the main request in that the destination information specifies *a plurality of destinations"* and *"a plurality of corresponding appointment times"* and in that it further comprises the following steps:

(i) determining at the vehicle (40) whether the expected time of arrival at one or more of the destinations is later than the corresponding appointment time,

(ii) generating late information if the expected time of arrival at one or more destinations is later than the corresponding appointment time,

(iii) transmitting the late information to the dispatch,

(iv) generating updated information at the dispatch in response to the late information,

(v) transmitting the updated destination information to the vehicle.

9.2.1 As shown in Figure 3 of D4, the schedule data received by and stored in the controller 27 comprise a plurality

of destinations with their corresponding coordinates and scheduled arrival times.

9.2.2 Thus, the question to be considered is whether the additional steps (i) to (v) would make the claimed method inventive over the available prior art.

9.3.1 As argued by the respondent, the problem addressed by the contested patent and solved by the method according to claim 1 of the auxiliary request Va can be seen in providing a method particularly suitable for fleet management.

9.3.2 It is known from D3 to use bidirectional communications systems to exchange data between the headquarters of a shipping company and its freight vehicles in order to speed up and optimize the delivery of goods.

9.3.3. According to claim 1 of D3, both the vehicles and a central dispatch are equipped with transceivers and processors, so that a data communications link can be established between the processors in the vehicles and the processor at the dispatch.

9.3.4 The exchanged information comprises the vehicle's current position, its starting location, its destination, its scheduled arrival time and its expected arrival time. Furthermore, D3 (column 1, lines 5 to 15) specifies that this communications link can be used to give instructions.

9.4.1 As the goal of a shipping company consists essentially in ensuring the reliable and efficient transportation of goods to their destinations, it can be expected that

its control centre would be interested in receiving up-to-date information about the location of its vehicles and the delivery status of the transported goods so as to be able to react promptly to unforeseen events which may hinder or delay a timely delivery.

9.4.2 Against this background, it was obvious to a person skilled in the art, starting from D4 and wishing to adapt the known system to the requirements of shipping companies, to include steps directed towards informing the dispatch about the occurrence of delays in the delivery of goods and offering the possibility of updating a vehicle's schedule in response to its inability to keep an appointment timetable.

9.4.3 Furthermore, the Board wishes to note that steps (i) to (iii) correspond essentially to the actions that a driver of a delivery vehicle would reasonably take upon realizing that he/she would not be able to reach the next destination at the scheduled time: *i. e.* informing his/her control centre and asking for instructions. In reaction, the control centre would take the opportunity to update the driver's schedule (cf. steps (iv) and (v)).

9.5.1 In summary, the claimed method can be regarded as a combination of steps which appear obvious in the light of D3 and of general knowledge common in the field of fleet management.

9.5.2. Hence, the subject-matter of claim 1 does not involve an inventive step within the meaning of Article 56 EPC.

10. *Auxiliary request VI*

10.1.1 Claim 1 according to the auxiliary request VI differs from claim 1 of the main request in that the destination information comprises *"routing information, the routing information specifying a predetermined route for the vehicle (40) to travel to the destination"* and in that the ETA is calculated in response to the vehicle position and *"to the routing information".*

10.2.1 According to the examples given in the application as originally filed, a predetermined route could also be a predetermined sequence of destinations to be reached in accordance with a certain schedule. On the other hand, the term *"predetermined route"* may cover any general indication on the type of roads to follow or town to avoid or pass through.

10.2.2 For instance, it can be considered that the schedule according to Figure 3, which comprises a plurality of destinations to be reached in a predetermined sequence, constitutes a predetermined route to be followed when delivering goods.

When determining the ETA at a destination identified by the schedule of Figure 3, it is implicit that not only the destination, *i.e.* its coordinates, but also the particular sequence of destinations, *i.e.* the route, has to be taken into account.

10.2.3 On the other hand, if it is assumed that routing information in the context of the patent in suit can only mean information relating to the roads to follow

when travelling to a particular destination, it is reasonable to assume that a delivery company may wish to give its drivers instructions concerning not only their delivery schedule but also the roads they should travel. In order to do so, it would be obvious to add routing information to the destination information to be sent to the fleet vehicles. In this case, it is self-evident that a reliable estimate of the time of arrival at a destination presupposes that not only the vehicle position and the destination coordinates but also the routing information enter into the determination of the ETA.

10.3.1 In other words, starting from D4, which explicitly refers to delivery companies (column 1, lines 18 to 24), a person skilled in the art wishing to provide a system that satisfies well-known needs and desires of a shipping company would arrive at a system falling within the terms of claim 1 of the respondent's request VI without involving an inventive step (Article 56 EPC).

11. *Conclusions*

11.1.1 For the sake of completeness, the Board notes that, at the oral proceedings, the respondent drew the Board's attention to decision T 0571/06 issued by the same Board, albeit in a different composition, and hinted at alleged similarities with the issues considered in the present appeal proceedings.

11.1.2 Having carefully considered the respondent's arguments and the cited decision, the Board comes, however, to

the conclusion that case T 0571/06 bears no resemblance with the present appeal.

11.2.1 As none of the respondent's requests provides a basis for maintaining the contested patent in amended form, the patent has to be revoked in accordance with the appellant's request.

## Order

## For the above reasons it is decided that:

1. The decision under appeal is set aside.

2. The patent is revoked.

The Registrar: The Chairman:

C. Moser M. Ruggiu