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**Datasheet for the decision
of 9 January 2009**

Case Number: T 0895/06 - 3.4.03

Application Number: 97904096.1

Publication Number: 0877992

IPC: G07C 5/00

Language of the proceedings: EN

Title of invention:

Motor vehicle monitoring system for determining a cost of insurance

Patentee:

Progressive Casualty Insurance Company

Opponent:

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Headword:

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Relevant legal provisions (EPC 1973):

EPC Art. 56

Keyword:

"Inventive step (no) - after amendment"

Decisions cited:

-

Catchword:

-



Case Number: T 0895/06 - 3.4.03

D E C I S I O N
of the Technical Board of Appeal 3.4.03
of 9 January 2009

Appellant: Progressive Casualty Insurance Company
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Mayfield Village, OH 44143 (US)

Representative: Beresford, Keith Denis Lewis
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Decision under appeal: Decision of the Examining Division of the
European Patent Office posted 6 December 2005
refusing European application No. 97904096.1
pursuant to Article 97(1) EPC.

Composition of the Board:

Chairman: G. Eliasson
Members: R. Q. Bekkering
T. Bokor

Summary of Facts and Submissions

I. This is an appeal against the refusal of application 97 904 096 for lack of an inventive step, Article 56 EPC 1973, with respect to

D14: EP 0 383 593 A.

II. Observations by a third party pursuant to Article 115 EPC 1973 were filed in the appeal proceedings referring *inter alia* to the following further prior art document:

D17: US 5 485 161 A

III. Reference is also made to the following prior art document cited in the application as originally filed (description, page 4, lines 23 to 25):

D18: US 4 667 336 A

IV. At oral proceedings before the board the appellant applicant requested that the decision under appeal be set aside and that a patent be granted in the following version:

Claims 1 to 8 (labelled "2.45 pm") as submitted during oral proceedings.

Furthermore, the appellant requested that the proceedings be stayed pending the outcome of the referral to the Enlarged Board of Appeal G 03/08, should the board decide inventive step disregarding claim features for being non-technical.

V. Claim 1 reads as follows:

"A system for the determination of motor vehicle insurance costs comprising:

a) a plurality of data gathering apparatus (300, 412, 414, 420) provided respectively on a plurality of motor vehicles;

b) a data processing system (416), remote from said motor vehicles, for determining insurance costs for said vehicles; and

c) means (418) associated with each said data gathering apparatus (300, 412, 414, 420) and with said remote data processing system (416) for communicating data from said data gathering apparatus (300, 412, 414, 420) to said remote data processing system (416) via a communications link;

d) wherein each said data gathering apparatus (300, 412, 414, 420) comprises

(i) means, utilising navigation signals from a GPS (Global Positioning System) or other locating system for tracking the vehicle location, for monitoring (412, 414, 420) data elements representative of one or more actions of the operator thereof, the data elements being representative of at least all of: vehicle location; time of day driven; the type of road driven on; and the safety equipment used;

(ii) recording means (402) operable for recording, in combination with date, time, and location those of said data elements whose values satisfy predetermined safety conditions; and

(iii) means which determines whether the vehicle is operating and which permits said recording of

said data elements only if the vehicle is operating;

e) wherein said communicating means (418) is operable for communicating said data recorded by said recording means (402) to said remote data processing system (416); and

f) wherein said remote data processing system (416) comprises

(i) vehicle sensor record file means (204) arranged for storing said data elements communicated by said communicating means (418) to said data processing system (416) from said respective data gathering apparatus (300, 412, 414, 420),

(ii) insured profile file means arranged for storing data defining insured profiles,

(iii) algorithm file means arranged for storing an algorithm which utilises a combination of data for the computation of data representative of insurance cost, said combination of data comprising said communicated data stored in the communicated vehicle sensor record file means (204) and insured profile data stored in said insured profile file means, and

(iv) processing means arranged for determining (steps 210, 212 and 214) insurance cost data related to predetermined periods for each said respective vehicle by processing said combination of data in accordance with an algorithm stored in said algorithm file means, said processed combination of data comprising the communicated data which is stored in relation to the respective vehicle in said communicated vehicle sensor record file means (204) and which relates to the

corresponding period and insured profile data stored in said insured profile file means in relation to the respective vehicle".

VI. The appellant applicant argued as follows:

The subject-matter of claim 1 of the main request was new and involved an inventive step over the available prior art. Document D18 disclosed a system for recording automobile seat belt usage for insurance purposes. The system recorded the number of seat belt buckling/unbuckling operations of the driver and provided him with a discount on his insurance premium for a high seat belt usage. The system was however prone to fraud. In particular, a repetitive buckling and unbuckling operation would allow the driver to falsify the seat belt usage count by the system. The system as defined in claim 1 effectively prevented this type of fraud. None of the other cited prior art documents addressed this problem. In particular, document D17 disclosed a system to control vehicle speed. It had no bearing on the problem of fraud prevention.

Reasons for the Decision

1. The appeal is admissible.

2. *Novelty, inventive step*

2.1 *Document D18*

Document D18 discloses a system for detecting and recording each time an automobile seat belt is used. Depending on the level of seat belt usage the driver earns discounts on car insurance premiums. The seat belts contain switch contacts so that when the seat belt is buckled, an electric circuit is completed. After a delay, in a preferred embodiment five minutes, the fact that the seat belts have been buckled is counted by a counter and upon the seat belts being unbuckled the counter provides its output to a storage unit (column 1, lines 34 to 46; figures 1 and 2). The storage unit is designed to operate in conjunction with eg a magnetic card so that its contents, ie the number of bucklings of the seat belts, can be obtained from the magnetic card which is inserted into the storage unit (column 1, lines 47 to 51;; figure 3).

After eg a one year period of use, the magnetic card is removed from the storage unit and forwarded to the driver's insurance company which verifies usage of the seat belts at a predetermined level. A personal computer with a card reading device can be used by the insurance company to obtain the usage data recorded on the magnetic card. If the driver has used the seat belts as promised, i.e., above the aforementioned predetermined level, then the driver earns an insurance policy discount (column 1, lines 52 to 68).

In particular, document D18 discloses, using the terminology of claim 1, a system for the determination of motor vehicle insurance costs comprising:

- a) a plurality of data gathering apparatus (cf figure 2) provided respectively on a plurality of motor vehicles;
- b) a data processing system (insurance company office), remote from said motor vehicles, for determining insurance costs for said vehicles; and
- c) means (eg magnetic card) associated with each said data gathering apparatus and with said remote data processing system for communicating data from said data gathering apparatus to said remote data processing system;
- d) wherein each said data gathering apparatus comprises
 - (i) means for monitoring data elements representative of one or more actions of the operator thereof, the data elements being representative of the safety equipment (seat belt) used;
 - (ii) recording means operable for recording those of said data elements whose values satisfy predetermined safety conditions (seat belt being used); and
- e) wherein said communicating means (magnetic card) is operable for communicating said data recorded by said recording means to said remote data processing system.

Furthermore, it is implicit from document D18 that the insurance company office disposes of data processing means for calculating the insurance premium, based on stored data defining insured profiles, as this was conventional at the filing date of D18. Moreover, in D18 necessarily some algorithm is used which utilises a combination of data for the computation of data

representative of insurance cost, the combination of data comprising the communicated data relative to the vehicle sensor and insured profile data. The insurance cost data related to predetermined periods for each said respective vehicle are determined based on the combination of data in accordance with this algorithm, the combination of data comprising the communicated data relative to the respective vehicle in said communicated vehicle sensor record data and which relates to the corresponding period and insured profile data of the respective vehicle.

2.2 The subject-matter of claim 1, thus, differs from document D18 in that:

(1) a communications link is provided between the vehicle and the remote data processing system;

(2) means are provided, utilising navigation signals from a GPS (Global Positioning System) or other locating system for tracking the vehicle location, for monitoring data elements representative of vehicle location, time of day driven and type of road driven on;

(3) the data elements whose values satisfy predetermined safety conditions are recorded in combination with date, time, and location;

(4) means are provided which determine whether the vehicle is operating and which permit recording of the data elements only if the vehicle is operating; and

(5) the data processing system uses file means and processing means using an algorithm for determining insurance cost data.

2.3 The subject-matter of claim 1 is, therefore, new over document D18 (Articles 54(1) and (2) EPC 1973).

2.4 The effect of difference (1) above, the use of a communications link between the vehicle and the remote data processing system, is a more convenient, modern data transfer from the vehicle to the remote data processing system, avoiding the need to handle magnetic cards. As this feature does not have any interaction or synergy with any of the other differences listed above, it is considered on its own.

The partial objective problem to be solved with respect to D18 in relation to this feature can thus be formulated as providing more convenient data transfer means.

The solution offered by claim 1, the use of a communications link, would be obvious to the person skilled in the art, as, at the filing date of the application, suitable communications links were generally available and commonly used for communicating data between vehicles and remote data processing systems (see eg document D17 (cf column 9, line 46 to column 10, line 4)).

2.5 The effect of the above differences (2) and (3) is that further insurance relevant data such as excessive speed, exceeding the maximum allowed speed at a particular location, can be recorded and used to encourage drivers

to drive more safely and thus to further reduce insurance settlement costs. Also these features do not have any interaction or synergy with any of the other differences listed above and is thus considered on its own.

The partial objective problem to be solved with respect to D18 in relation to feature (2) and (3) can thus be formulated as to include further insurance relevant data.

The fact that speeding, ie exceeding the maximum allowed speed at a particular location, is relevant to the insurance company and a candidate to be included in the scheme of D18 to reduce insurance settlement costs, would be obvious to the person skilled in the art. As is well known and also acknowledged in the application (description page 1, line 27), the driver's driving record, in particular the number of traffic violations, above all citations for speeding, are conventionally already taken into consideration by the insurance company for risk and insurance cost assessment. Accordingly, it would be obvious to the person skilled in the art to include in the system of D18 further insurance relevant data such as a record of violations of the maximum allowed speed. A system solution to this end is offered in document D17.

Document D17 discloses a system for controlling vehicle speed. The system also allows for reporting the location and (excessive) speed of a vehicle to the customer organization (system user) or law enforcement organisation (police) (column 10, lines 5 to 7 and column 8, lines 37 to 42). The system includes eg a GPS

device onboard the vehicle for determining the location and heading of the vehicle and a speed limit database. Excessive speed is determined based on the actual vehicle speed and the maximum posted speed at the vehicle location (ie also on the type of road driven on (eg highway, city etc.)) derived from the database.

It would accordingly be obvious to the skilled person to include such a system in the system of D18 for recording speed violations, and to send this data via the communications link to the insurance company and feed this data into the calculation of the insurance premium. It would furthermore be obvious to the person skilled in the art to record speed violations, or other safety conditions affecting the insurance premium such as failure to use the seat belts etc., with a record of date, time and location so as to provide the insurance company with documented, verifiable data, should the insured driver challenge the calculated insurance premium.

The appellant argued that the correlation of the location of the vehicle with the information as to whether the seat belt was buckled prevented fraud possible in the system disclosed in document D18, where a driver could buckle and unbuckle many times successively without moving his vehicle, eg in his garage.

This argument could not convince, as neither claim 1, nor the application as originally filed as a whole, provides for any correlation between location data and seat belt usage.

2.6 As to difference (4) listed above, means to determine whether the vehicle is operating and to permit recording of the data elements only if the vehicle is operating, the board finds that when means to record excessive speed are introduced as discussed above, it would be obvious to record data elements relative to vehicle location, time of day driven and type of road driven only when the vehicle is operating.

Regarding the data element relative to the safety equipment used, eg seat belts, the appellant argued that the feature of recording these data only when the vehicle is operating, effectively prevented fraud possible in the system known from document D18.

As the system of D18 is always powered, irrespective of whether the vehicle is operating, and records the buckling/ unbuckling operations, a conceivable fraud discussed in this document is that a driver could seek to increase the counts by rapidly buckling and unbuckling, regardless of whether the vehicle is operating or not. To avoid this type of fraud, a time delay is introduced so that buckling is only counted after eg five minutes (column 2, lines 30 to 43). A second type of conceivable fraud discussed in D18 is where the driver buckles the seat belt and then stuffs it under the seat (column 2, lines 43 to 47).

Admittedly, the first type of fraud discussed is not entirely overcome in D18 as a count would still be recorded every five minutes. It is however noted that this type of fraud would be very time consuming for the driver and it is therefore questionable whether it really would pose a problem. Still, the claimed system contributes to preventing this type of fraud insofar as

it only records data elements when the vehicle is operating. As to the second type of fraud discussed in D18, the claimed system does not prevent it: a driver could still stuff the seat belt under/behind his seat and the claimed system would record it as proper seat belt usage.

Accordingly, the board is not persuaded that the claimed system solves fraud with seat belt usage with respect to document D18. Rather, the claimed system provides an alternative solution to record seat belt usage for the purpose of calculating insurance premiums. The objective partial problem in this respect relative to D18 is thus to find such an alternative solution.

As is well known and acknowledged in document D18, automobiles are conventionally equipped with warning lights or chimes as reminders to buckle up (D18, column 1, lines 21 to 25)). These warning systems detect the seat belt being buckled up only if the vehicle is operating (typically when ignition turned on, engine running or vehicle exceeding a predetermined (low) speed).

It would be obvious to a person skilled in the art to detect seat belt usage for the purpose of calculating insurance premiums in the same straightforward way.

Furthermore, at any rate it would be obvious to the skilled person to monitor seat belt usage only when the vehicle is being operated in order to prevent the car battery from running low.

2.7 Finally, the last of the above differences (difference (5)), relating to the concrete implementation of the data processing system using file means and data processing means, provides for an automated data processing system for calculating the insurance premiums from the insured profile data and the recorded vehicle data.

Again, this feature does not have any interaction or synergy with any of the differences listed above, and is thus considered on its own. The partial objective problem to be solved with respect to D18 in relation to this feature can thus be formulated as providing a contemporary, automated data processing system.

The provision of such a system, including the provision of file means for storing the communicated data elements, file means for storing the insured profile data, file means for storing the algorithm for calculating the insurance cost data and processing means for performing the necessary operations for calculating the insurance costs data based on the algorithm, are conventional measures in data processing and would be obvious to a person skilled in the art.

2.8 Accordingly, the subject-matter of claim 1 is obvious to a person skilled in the art and, thus, lacks an inventive step in the sense of Article 56 EPC 1973.

The appellant applicant's request is thus not allowable.

3. The appellant requested, moreover, that the proceedings be stayed pending the outcome of the referral to the Enlarged Board of Appeal G 03/08, should the board

decide inventive step disregarding claim features for being non-technical.

As the above finding of lack of inventive step does not disregard any features for being non-technical, the conditions for the appellant's request to stay the proceedings are not met.

Order

For these reasons it is decided that:

The appeal is dismissed.

Registrar

Chair

S. Sánchez Chiquero

G. Eliasson