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# Datasheet for the decision of 19 December 2019

Case Number: T 0466/15 - 3.5.02

Application Number: 04776021.0

Publication Number: 1627370

IPC: G08G1/01

Language of the proceedings: ΕN

#### Title of invention:

System and Method for Evaluating Vehicle and Operator Performance

### Patent Proprietor:

SpeedGauge, Inc.

### Opponent:

Tracker Network (UK) Limited

## Relevant legal provisions:

EPC Art. 123(2) RPBA Art. 13(1)

### Keyword:

Amendments extending beyond the content of the application documents as filed (yes)

Admittance of late filed auxiliary request (no) - does not overcome all problems, introduces new problems



# Beschwerdekammern Boards of Appeal Chambres de recours

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Case Number: T 0466/15 - 3.5.02

DECISION
of Technical Board of Appeal 3.5.02
of 19 December 2019

Appellant:

(Patent Proprietor)

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Decision under appeal:

Decision of the Opposition Division of the European Patent Office posted on 7 January 2015 revoking European patent No. 1627370 pursuant to Article 101(3)(b) EPC.

# Composition of the Board:

Chairman R. Lord
Members: F. Giesen

J. Hoppe

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# Summary of Facts and Submissions

- I. This appeal by the patent proprietor (appellant) lies from the decision of the Opposition Division posted on 7 January 2015 revoking European patent No. 1627370 pursuant to Article 101(3)(b) EPC. The Opposition Division had come to the conclusion that the opposed patent as amended contained subject-matter extending beyond the content of the application as originally filed.
- II. Oral proceedings before the Board took place on 19 December 2019. As announced by facsimile dated 18 December 2019, the respondent (opponent) was not represented at the oral proceedings.
- III. The final requests were as follows.

The appellant requested that the decision under appeal be set aside and that the patent be maintained in amended form:

on the basis of the main request, filed with letter dated 7 May 2015;

or as an auxiliary measure on the basis of one of the auxiliary requests 1 and 2, filed with letter dated 15 November 2019;

or on the basis of one of the auxiliary requests 3 and 4, filed with letter dated 25 January 2016; or on the basis of auxiliary request 5, filed during the oral proceedings on 19 December 2019.

The respondent requested in writing that the appeal be dismissed.

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

"A system for evaluating performance of an operator of a vehicle (124), the system comprising:

a map database (104) configured to provide map data (102), wherein the map data (102) comprises a plurality of thoroughfares, at least one of the plurality of thoroughfares including a plurality of road segments (202-222) and wherein at least one road segment (202-222) is associated with at least one road segment attribute (219, 221, 223);

a vehicle/operator database (106) configured to provide vehicle and operator data (128), wherein the vehicle data (122) includes information acquired during operation of the vehicle (124) and the operator data identifies an operator of the vehicle during vehicle operation, the vehicle and operator data (128) encompassing an entire instance of vehicle operation by the operator;

an analysis engine (110) configured to analyze data (102) from the map database (104), the map data (102) including the at least one road segment attribute (219, 221, 223) associated with the at least one road segment (202-222) with respect to the provided vehicle and operator data (128), the vehicle (124) and operator of the vehicle having traversed the at least one road segment (202-222), the analysis engine (110) further configured to generate an indication of operator performance of the vehicle (124) with respect to the at least one road segment (202-222) and the at least one road segment attribute (219, 221, 223) associated with the at least one road segment (202-222), wherein the

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operator, the at least one road segment (202-222) and the at least one road segment attribute (219, 221, 223) are identified as part of a user request (132); and

a report generator (112) configured to generate evaluation information (130) in accordance with the indication generated by the analysis engine (110), the evaluation information (130) indicating performance of the operator with respect to the at least one road segment (202-222) and the associated at least one road segment attribute (219, 221, 223) identified by the user request (132), the evaluation information (130) indicating performance over a time period identified by the user request (132)."

V. Here and in the following, underlining was added by the Board to highlight those features that differ from the main request. Claim 1 according to auxiliary request 1 reads as follows:

> "A system for evaluating performance of an operator of a vehicle (124), the system comprising:

a map database (104) configured to provide map data (102), wherein the map data (102) comprises a plurality of thoroughfares, at least one of the plurality of thoroughfares including a plurality of road segments (202-222) and wherein at least one road segment (202-222) is associated with road segment attributes (219, 221, 223);

a vehicle/operator database (106) configured to provide vehicle and operator data (128), wherein the vehicle data (122) includes information acquired during operation of the vehicle (124) and the operator data identifies an operator of the vehicle during vehicle

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operation, the vehicle and operator data (128) describing one or more of vector, operational, and location data of the vehicle (124) and/or the operator over an extended period of time, the vector data including positional information and velocity information, the operational data including information relating to operational parameters of the vehicle (124) such as centrifugal force, rotational engine speed, torque, oil temperature, or tire pressure readings, the extended period of time comprises one day or several weeks;

an analysis engine (110) configured to analyze data (102) from the map database (104), the map data (102) including the road segment attributes (219, 221, 223) associated with the at least one road segment (202-222) with respect to the provided vehicle and operator data (128), the vehicle (124) and operator of the vehicle having traversed the at least one road segment (202-222), the analysis engine (110) further configured to generate an indication of operator performance of the vehicle (124) with respect to the at least one road segment (202-222) and the road segment attributes (219, 221, 223) associated with the at least one road segment (202-222), wherein the operator, the at least one road segment (202-222) and the road segment attributes (219, 221, 223) are identified as part of a user request (132);

# a processor (108) comprising the analysis engine (110) and the report generator (112); and

a report generator (112) configured to generate evaluation information (130) in accordance with the indication generated by the analysis engine (110), the evaluation information (130) indicating performance of

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the operator with respect to the at least one road segment (202-222) and the associated <u>road segment</u> attributes (219, 221, 223) identified by the user request (132), the evaluation information (130) indicating performance over a time period identified by the user request (132)."

VI. Auxiliary requests 2 to 4 all contained in claim 1 the feature:

"the vehicle and operator data (128) encompassing an entire instance of vehicle operation by the operator".

VII. Auxiliary request 5 in claim 1 contained the feature:

"the vehicle and operator data (128) encompassing an entire instance of vehicle operation by the operator and describing one or more of vector, operational, and location data of the vehicle (124) and the operator over and extended period of time, the vector data including positional information and velocity information, the operational data including information relating to operational parameters of the vehicle (124)".

VIII. The appellant's arguments in so far as they are relevant for the present decision were essentially as follows:

Amendments - main request

The feature "the vehicle and operator data (128) encompassing an entire instance of vehicle operation by the operator" was originally disclosed.

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There was no requirement in the EPC for a literal disclosure, only for a direct and unambiguous disclosure in the application as a whole.

The original application stressed in several different passages that long-term and habitual behaviour was monitored, see paragraph [0008] of the WO-publication (WO 2004/104968 A1). According to paragraph [0015] the invention allowed a user to assess whether a vehicle is being operated in a potentially dangerous manner, and according to paragraph [0012], tendencies of a vehicle or its operator to operate in an unsafe manner could be assessed. Paragraph [0031] disclosed that the vehicle/ operator data comprised data from a particular vehicle at various times during its scheduled deliveries or long-term statistical information describing one or more vehicles' and/or operators' vector, operational and location data over an extended period of time. It was thus originally disclosed in the above passages that data in the vehicle/operator database comprised data over a continuous and extended period. It followed from this that it comprised entire instances.

In paragraph [0048] and Figure 1 it was disclosed that a user of the system could query the vehicle/operator database for driving information on a particular date and a particular time. The availability of such information showed that data was collected for an entire trip. According to paragraph [0053], data encompassing time periods from as little as one day or over several weeks can be retrieved from the vehicle/operator database. Figure 4 and paragraph [0060] showed that from the vehicle/operator data the percentage of route speeding or percentage of streets speeding could be calculated. In order to calculate percentages, the database had to encompass entire instances of vehicle

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operation by the operator. It was clear from these passages that the entire instance had to cover at least a route spanning multiple streets.

In view of the foregoing and since the claims need to be interpreted taking into account the patent as a whole, the expression "entire instance" cannot be understood as comprising short actions such as turning or single speeding events. The "entire instance of vehicle operation" rather referred to an extended period, such as one covering the duration of a route or an entire trip as shown in figure 4 and paragraphs [0016] and [0060] rather than short events.

The description disclosed long-term data, and the expression would have to be understood accordingly to not encompass short actions. Furthermore, paragraph [0031] disclosed that the vehicle/operator data could comprise speeds travelled by a particular vehicle at various times during scheduled deliveries. These scheduled deliveries did not require a minimum time but could be very short. Paragraph [0015] disclosed that specific sets or subsets of data representing a driver's or vehicle's performance were analysed. There were no restrictions on how short these sets of data were. Hence the original application provided a basis even for very short instances of vehicle operation.

## Amendments - auxiliary requests

Paragraph [0053] disclosed that the data retrieved from the vehicle/operator database can include data pertaining to one day or several weeks. This was in particular a disclosure that one day is the lower limit of the duration of data saved in the vehicle/operator database. This was hence a direct and unambiguous

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disclosure of the amended subject-matter of claim 1 of auxiliary request 1 to 4.

Admittance - auxiliary request 5

This request could not have been submitted earlier as it had become apparent only from the discussion during the oral proceedings that the feature "the extended period comprises a day or several weeks" or the corresponding feature versions from the higher-ranking auxiliary requests presented a problem in the Board's view. Claim 1 according to this request was clearly allowable because the feature "encompassing an entire instance" was now clearly limited to an extended period of time. The wording of claim 1 was also consistent. Positional information was a vector because it was part of the vector data whereas location data was a scalar. Auxiliary request 5 should thus be admitted.

IX. The respondent's arguments in so far as they are relevant for the present decision were essentially as follows:

Main request

The feature "encompassing an entire instance" was not originally disclosed. There was neither a literal nor a direct and unambiguous disclosure of it.

Paragraph [0053] merely disclosed how much data could be requested, but not what the data in the database encompassed. This was especially true because the expression "entire instance" also covered instances which last for less than a day, like turning of a vehicle or operating it over a single short trip.

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### Auxiliary requests

Auxiliary requests 2 to 4 all contained the feature "the data encompassing an entire instance" and therefore contravened Article 123(2) EPC for the same reasons as the main request.

The respondent contended the claims were unclear. It was not clear whether the claimed period of time covered for example two days, and it was unclear because "several" had no objectively determinable meaning.

### Reasons for the Decision

- 1. The appeal is admissible.
- 2. Main request
- 2.1 The opposed patent was amended such that subject-matter extending beyond the content of the application as filed was added. (In the following, citations refer to the WO-publication of the opposed patent WO 2004/104968 A1.)
- The main question that had to be answered to decide on the main request was whether the feature "the vehicle and operator data (128) encompassing an entire instance of vehicle operation by the operator" was originally disclosed. It was uncontentious that there was no literal disclosure of this feature. The appellant argued that paragraphs [0008], [0012], [0015], [0016], [0031], [0048], [0053] and [0060] together with figures

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1 and 4 directly and unambiguously disclosed this feature.

2.3 The appellant argued that the feature "entire instance of vehicle operation" had to be understood in the light of the description as meaning entire trips or entire scheduled deliveries.

The Board has serious doubts that this feature could be understood in the manner proposed by the appellant, but even if *arguendo* and in the appellant's favour this interpretation were accepted, there would not be a direct and unambiguous disclosure of it for the following reasons.

2.4 Paragraphs [0008] and [0012] merely disclose that prior art solutions are unable to detect long term or habitual driving behaviour and that it is an object of the opposed patent to assess tendencies of drivers to operate the vehicle in an unsafe manner.

Paragraphs [0015] and [0016] mention assessing driver performance or operators being able to determine the time period over which drivers are to be evaluated, respectively. Nothing follows from these passages about what the vehicle/operator data encompasses.

2.5 Paragraph [0031] discloses that vehicle/operator data can comprise speeds travelled by a particular vehicle at various times during its scheduled deliveries. This passage does not disclose that the data in the database will encompass an entire scheduled delivery. The expression "encompass" suggests that the duration of the recorded vehicle data is longer than the entire duration of the scheduled delivery, which cannot be

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derived from the information that speeds are recorded at various times during the scheduled delivery.

Paragraph [0031] further discloses that vehicle/ operator data is limited only to the extent that it was some identifiable information about a particular vehicle. Obviously such a general statement is not an unambiguous disclosure of the data encompassing an entire instance of vehicle operation.

Paragraph [0031] further discloses that the vehicle/ operator database stores <a href="long-term">long-term</a> statistical <a href="information">information</a> describing one or more of vehicles' and/or operators' vector, operational and location data over an extended period of time.

Clearly, if long term statistical information is created somewhere in the claimed system, such data will describe vehicle data over an extended period of time, but this is not equivalent to saying that the vehicle/operator data itself covers an extended period of time. It is also possible to generate statistical long term information without keeping the raw vehicle/operator data from which it is extracted stored in the vehicle/operator database. Furthermore, a statement of the duration covered by the vehicle/operator data is not a direct and unambiguous disclosure of whether the data encompassed an entire trip. This is a question of likelihood given the normal length of trips but not a direct and unambiguous disclosure.

Therefore, this passage is not a direct and unambiguous disclosure of the vehicle/operator data comprising an entire instance of vehicle operation.

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Apart from the foregoing, the appellant has also not explained why they believe it to be justified to generalise from the specific disclosure in paragraph [0031] that the vehicle/operator data contains vector, operational and location data and that the vehicle data is speed data to a rather vague concept of undefined data encompassing an instance of vehicle operation.

- 2.6 Paragraph [0048] discloses that a user of a client can request driving information of a particular vehicle and its operator at a particular time and a particular date. This is a disclosure of what a user can request on a client device, not what is stored in the vehicle/ operator database. The query might not return any results for a particular time and date if there is no corresponding data in the database. Moreover, the availability of data at a particular time and date is not a direct disclosure that data is available during the entire scheduled delivery. Furthermore, the appellant has not explained how the "driving information" from paragraph [0048] related to the vehicle/operator data in the amended claim but merely tacitly assumed that they were synonyms. This passage therefore contains no direct and unambiguous disclosure of vehicle/operator data encompassing an entire instance of vehicle operation.
- 2.7 Paragraph [0053] discloses that the vehicle/operator data retrieved from the database can include as little as data pertaining to a particular vehicle/driver on one day or a larger return of data, for example a vehicle/driver's performance over several weeks.

The last sentence of the above paragraph is a disclosure that the vehicle/operator data retrieved from the database includes the performance of the

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vehicle or the driver over several weeks. This is clearly different from the statement that the vehicle/ operator data in the vehicle database covers a duration of several weeks, and this in turn is clearly not a direct and unambiguous disclosure of what the vehicle/ operator data recorded over a duration of several weeks encompasses. To illustrate this point, the number of times the speed of a vehicle exceeded a speed limit during a period of three weeks can be saved and could be regarded as performance data reflecting operator and speed data. This does, however, not mean that the speed data recorded over the three week period has to remain stored in the database, and, furthermore, this in turn would not mean that the recorded speed data necessarily encompassed an entire trip, which could be longer than three weeks.

The appellant's argument does not properly distinguish between data whose content is the performance over several weeks and vehicle/operator data recorded over several weeks and is, furthermore, based on the fallacy that trips of trucks are typically shorter than several weeks and therefore recording data over several weeks means that the vehicle data base encompasses entire trips. Those are considerations of likelihood which cannot replace the identification of a direct and unambiguous disclosure.

2.8 Paragraph [0060] together with figure 4 show an exemplary fleet summary report. The exemplary rankings in the report show percentage of street and route speeding among other things. First of all, it is not correct to conclude from the evaluation data shown in the report that vehicle/operator data, from which the evaluation data is extracted, stored in the data base covered a certain duration or "instances of vehicle"

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operation". Second, the claim is neither restricted to street or route speeding as vehicle/operator data. The added feature is therefore a generalisation from the actual disclosure and the appellant has been unable to explain why such a generalisation should be possible without adding subject-matter. In addition to that, there is no disclosure that data shown in the report in figure 4 cover an entire trip of a vehicle, which could be longer than the shown report length of only one day.

- 2.9 As a consequence, not even when accepting in the appellant's favour their interpretation of the term "entire instance" is there an original, unambiguous disclosure of the amendment.
- 2.10 The Board further wishes to point out that the appellant has adduced eight different paragraphs from across the entire description as well as two figures in order to construct a - in their view - direct and unambiguous disclosure. To the Board, if, as in the present case, a skilled person can infer a particular disclosure only by mosaicking information deduced from various paragraphs across the whole of the application, which are not clearly linked to each other, this is an indicator that there is no direct and unambiguous disclosure. The argument by the appellant shows at best that the proposed amendment, if given a certain meaning, which is certainly not the only objectively possible meaning, is not in contradiction with the application as originally filed, but this falls manifestly short of identifying a direct and unambiguous disclosure of it.
- 2.11 The main request is consequently not allowable.

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Although the above conclusion does not rest on this observation, the Board wishes to point out that in their opinion there is indeed no requirement for a literal disclosure for an amendment to meet the requirements of Article 123(2) EPC. Nevertheless, according to the gold standard a skilled person needs to be able to derive the amended feature directly and unambiguously, using common general knowledge, and seen objectively and relative to the date of filing, from the whole of the document as filed (see G2/10, Reasons 4.3).

If, as in the present case, a feature added to a claim does not have a clear technical meaning, but is rather itself technically ambiguous, it is hardly possible to imagine circumstances under which all possible meanings of such an ambiguous feature, which may not even be objectively determinable, could be directly and unambiguously derivable from the application as filed in the absence of a literal disclosure.

Moreover, the Board considers the appellant's argument to be circular. If, as the appellant has argued, an ambiguous feature added to a claim had to be given a particular meaning which was allegedly in line with the entirety of the description but which completely overrides the ordinary meaning of the feature, then it is hard to see how such a type of amendment could possibly contravene the requirements of Article 123(2) EPC. One rather has to be mindful of how potentially arbitrary an exercise it is to mosaic various unconnected passages from the entirety of the description in order to derive the "objective" meaning of an ambiguous expression.

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- 3. Auxiliary request 1
- 3.1 Claim 1 according to auxiliary request 1 was amended such that subject-matter extending beyond the content of the application as filed was added, contrary to the requirements of Article 123(2) EPC. In the light of this outcome, the question of its admittance into the proceedings could be left open.
- 3.2 Claim 1 contained the feature that the

"vehicle/operator database was configured to provide vehicle and operator data [...] describing one or more of vector, operational and location data of the vehicle and/or the operator over an extended period of time [...], the extended period of time comprises one day or several weeks".

3.3 Similarly to the main request, the appellant argued that paragraphs [0031] and [0053] provided a disclosure of this feature, but as the Board pointed out in that context in points 2.5 and 2.7 above, the disclosures of both paragraphs do not concern vehicle/operator data, but rather long-term statistical information and performance reflecting vehicle/operator data, respectively. Furthermore, the appellant failed to explain why the long-term statistical information from paragraph [0031] and the performance data from paragraph [0053] were identical and hence why the respective information about durations, i.e. "extended period of time" and "one day or several weeks" could be combined into one feature in the amended claim. The appellant has also not explained to the Board's satisfaction where they see a disclosure of the "vehicle and operator data describing one or more of vector, operational and location data". Paragraph

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[0031] is concerned with long term statistical data describing vehicle/operator data. Other passages, such as paragraph [0017] disclose that vehicle data is comprised of vector data and operational data. The Board cannot find any original direct and unambiguous disclosure of the information that the data in the vehicle/operator database merely describes vector and operational data rather than being comprised of it.

- 4. Auxiliary requests 2 to 4
- 4.1 Claim 1 according to each of auxiliary requests 2 to 4 was amended such that subject-matter extending beyond the content of the application as filed was added, contrary to the requirements of Article 123(2) EPC. In the light of this outcome, the question of their admittance could be left open.
- 4.2 The various versions of claim 1 according to these requests all contained the feature "vehicle/operator data encompassing an entire instance of vehicle operation".

The further amendments to claim 1 according to these requests, i.e. stating that vehicle data describe one or more of vector, operational and location data of the vehicle and the operator over an extended period of time and the extended period of time comprises "one day or several weeks" (auxiliary request 2) or "at least one day" (auxiliary requests 3 and 4), do not remedy the fact that any statement about long-term statistical data (paragraph [0031]) and performance data (paragraph [0053]) cannot be taken to be a direct and unambiguous disclosure about the duration over which vehicle and operator data are stored in the database, and that this

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information in turn cannot be taken to be a direct and unambiguous disclosure about whether the data encompasses an entire trip, let alone something as ill-defined as an entire instance.

- 5. Auxiliary request 5
- 5.1 Auxiliary request 5 was submitted during the oral proceedings before the Board. Its admittance is therefore at the discretion of the Board pursuant to Article 13(1) RPBA 2007.
- 5.2 Claim 1 of this request still contained the feature concerning the data "encompassing an entire instance of vehicle" operation, which the Board had found not to be originally disclosed. The Board cannot see how the deletion of the feature "the extended period of time comprising at least a day" from the higher ranking auxiliary request could overcome this deficiency.

Furthermore, upon a prima facie examination the claim amendments appears to introduce a lack of clarity. The amended claim appears to use inconsistent language concerning on the one hand "location data" and on the other hand "positional information". The appellant has argued that location data was to be understood as a scalar whereas positional information was a vector information and hence included not only the position but the direction in which the vehicle was moving. The Board observes that on a prima facie examination there appears to be no disclosure in the opposed patent which could support this argument.

5.3 Admitting auxiliary request 5 would therefore have necessitated the discussion of new potential clarity

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problems without however clearly overcoming the added subject-matter problem of the higher-ranking requests. Even if it were true that this auxiliary request could not have been filed earlier, as the appellant argued, but which is not the case in the Board's opinion, it is not an appropriate reaction in that it does not address all issues that crystallised during the discussion at the oral proceedings.

- 5.4 Admitting this request would therefore have been contrary to the required procedural economy. The Board therefore exercised its discretion under Article 13(1) RPBA 2007 not to admit it into the proceedings.
- 6. Since, for the reasons discussed above, all of the requests of the appellant are either not allowable or have not been admitted into the proceedings, the Board accedes to the respondent's request.

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# Order

# For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:

R. Lord



U. Bultmann

Decision electronically authenticated