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Case Number: T 2367/22 - 3.5.01

Application Number: 18156229.9

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Language of the proceedings: ΕN

Title of invention:

TRAVEL PROCESS PREDICTION SYSTEM AND COMPUTER PROGRAM

Applicant:

The Aqua Enterprise Company

Headword:

Travel process prediction/THE AQUA ENTERPRISE COMPANY

Relevant legal provisions:

EPC Art. 56 RPBA 2020 Art. 12(6), 13(2)

Keyword:

Inventive step - predicting travel time (no - not technical)

Decisions cited:

T 1148/18, T 1670/07, T 1798/13



Beschwerdekammern Boards of Appeal Chambres de recours

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Case Number: T 2367/22 - 3.5.01

DECISION
of Technical Board of Appeal 3.5.01
of 12 September 2023

Appellant: The Aqua Enterprise Company

(Applicant) 4 Urikura

Kisarazu-shi, Chiba 292-0007 (JP)

Representative: Patentship

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Decision under appeal: Decision of the Examining Division of the

European Patent Office posted on 1 June 2022 refusing European patent application No. 18156229.9 pursuant to Article 97(2) EPC.

Composition of the Board:

Chairman W. Chandler Members: R. Moser

C. Schmidt

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Summary of Facts and Submissions

- I. This case concerns the applicant's appeal against the decision of the examining division to refuse the European patent application No. 18156229.9.
- II. The examining division held that the independent claims of the main and auxiliary requests 1 to 21 were not inventive over a general-purpose networked computer system. In essence, they considered that predicting a travel process of a traveler was a non-technical activity and that the produced output, such as an estimated passage time, did not serve a technical purpose. The examining division further held that claim 1 of auxiliary request 22, filed on 28 February 2022, was not inventive over D6 (US 2007/0229272 A1) and that the then auxiliary requests 23 to 27, filed during the oral proceedings on 28 April 2022, were not admissible under Rule 137(3) EPC.
- III. In the statement setting out the grounds of appeal, filed on 4 October 2022, the appellant requested that the decision be set aside and a patent be granted on the basis of the refused main or auxiliary requests 1 to 21, or newly filed auxiliary requests 22 to 26, or auxiliary request 27 which had not been admitted into the examination proceedings under Rule 137(3) EPC.
- IV. In the communication accompanying the summons to oral proceedings, the Board tended to agree with the examining division that the main and auxiliary requests 1 to 21 were not inventive over a general-purpose networked computer system and that claim 1 of auxiliary request 22 was not inventive over D6. The Board further tended to consider that auxiliary requests 23 to 27,

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irrespective of whether or not they met the requirements of Article 123(2) EPC, were unclear and not suitable to overcome the inventive step objection.

- V. In a letter dated 11 August 2023, the appellant submitted new auxiliary requests 28 to 43 and provided arguments in favour of inventive step.
- VI. Oral proceedings took place by videoconference on 12 September 2023. The appellant's final requests were to set aside the decision and to remit the case to the examining division for further prosecution on the basis of the above-mentioned requests (main and 43 auxiliary requests).

At the end of the oral proceedings the Chairman announced the Board's decision.

VII. Claim 1 of the main requests reads:

A travel process prediction system predicting a travel process of a travel object traveling with transportation repeatedly operated at specific time, characterized by comprising:

a means for specifying passage time at which a travel object actually passes through each of a plurality of passage points at a departure/arrival facility of transportation;

a means for acquiring transportation specifying information specifying transportation used by the travel object;

a means for acquiring situation information indicating a situation in which the travel object uses the transportation;

a means for storing passage time at each passage point, transportation specifying information and

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situation information, in an associated manner for each of a plurality of travel objects;

a means for extracting, from the means, a plurality of combinations of passage time concerning a specific passage point and other information associated with the passage time; and

a means for calculating, based on the extracted plurality of combinations, an estimate value of passage time at which a travel object passes through a specific passage point under a specific condition by conducting a regression analysis for obtaining a relationship between the passage time and said other information, or a calculation of a mean or variance of the passage time.

VIII. Claim 1 of auxiliary request 9 essentially differs from claim 1 of the main request by defining that the means for specifying passage time in the first feature, in addition, are

configured for checking a passage of a travel object

and by adding the following features at the end of the claim:

a means configured for storing an explanatory text which explains a result of a statistical calculation and which is associated with a feature of information used in the statistical calculation and a result of the statistical calculation;

a means configured for extracting the explanatory text in accordance with the feature of information actually used in the statistical calculation and the result of the actual statistical calculation; and an output means configured for processing the

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calculated estimate value and the extracted explanatory text for outputting from the output means.

IX. Claim 1 of auxiliary request 22 reads:

A travel process prediction system, comprising:

a travel process prediction apparatus (1) performing processing for statistically predicting a travel process of a travel object, which corresponds to an estimate value or a statistical test result conserning [sic] passage time, elapsed time or results of comparison;

a communication network (N) connecting the travel process prediction apparatus (1);

one or a plurality of check machines (21) configured for issuing or reading an ID of a travel object, checking a passage of the travel object and detecting date and time of the passage;

an information acquiring apparatus (2) connected to the or a plurality of check machines (21) through a communication network installed at a departure/arrival facility, each check machine (21) being configured to transmit the issued or read ID and the detected date and time to the information acquiring apparatus (2), which stores the received information therein, wherein the information acquiring apparatus (2) is connected to the communication network (N) and communicates with the travel process prediction apparatus (1) through the communication network (N);

a transportation information storing apparatus (4) configured to store information related to transportation, the transportation information storing apparatus (4) being connected to the communication network (N);

a weather information storing apparatus (5) configured to store information related to the weather,

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the weather information storing apparatus (5) being connected to the communication network (N); and an input/output device (7) configured to communicate with the travel process prediction apparatus (1) through the communication network (N) to output information including a prediction result obtained by the travel process prediction apparatus (1).

X. The appellant's arguments are discussed in detail in the reasons for the decision.

Reasons for the Decision

The invention

- 1. The invention concerns a system for more accurately predicting a travel time ("travel process"), by including predictions of the time spent waiting at various points during the trip, such as in the departure or arrival hall at an airport (see paragraphs [0004], [0005] and [0026] of the Al-publication).
- 2. The prediction relies on historical data, specifically the "passage time", which denotes instances when travelers pass through different checkpoints at the airport, along with corresponding "transportation specifying" (e.g. flight) and "situation" (e.g. weather) information see Figure 8. It employs regression analysis along with statistical tests for means and variances.
- 3. The prediction results are, for example, an estimated time for a traveller to reach an arrival gate at the airport ("estimate value of passage time"), the time elapsed between passage points or an estimated duration

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between the completion of boarding and passage at a specific passage point.

Moreover, based on the outcome of statistical tests, the user is provided with advice ("explanatory text" in claim 1 of auxiliary request 9), such as "Make travel plan with sufficient time to spare" (see Figure 19, "ADVICE T").

Main request, claim interpretation

- 4. The wording of claim 1 is very general and, thus, admits a broad interpretation. It defines a system for predicting a travel process of a travel object comprising various means for "specifying passage time", "acquiring transportation specifying information", "acquiring situation information" or "calculating ... an estimate value of passage time". The means are claimed in functional terms, lacking specific technical details.
- 5. The appellant argued that, considering Figures 1, 2 and 6 along with paragraphs [0032] to [0035], [0037], [0041] and [0055] of the application, it was apparent that the claim specified a particular hardware configuration/architecture and implementation that could not be equated with a general-purpose networked computer system.
- 6. The Board interprets claim 1 in its broadest possible way, namely as a system comprising means for (even manually) inputting ("specifying", "acquiring") data, for storing and extracting data from storage and calculating a mean value using the extracted data. A general-purpose networked computer possesses all these means and, thus, meets the criteria for the system or

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hardware defined in claim 1.

Furthermore, since it is the claims that define the matter for which protection is sought (Article 84 EPC), relying on features not present in the claims is not permissible when evaluating their compliance with the EPC.

Main request, inventive step (Article 56 EPC)

7. The appellant essentially argued that claim 1 defined a plurality of technical features and, thus, was not excluded from patentability under Article 52(2) and (3) EPC. Furthermore, the mathematical algorithm for predicting a travel time, including regression analysis and probability density functions (see e.g. paragraph [0107]), contributed to the technical character of the invention and, therefore, had to be taken into account for assessing inventive step (see Guidelines for Examination, section G-II, 3.3).

As explained in paragraph [0057], the claimed system was able to collect detailed information, including weather data, and harnessed an extensive multivariate data set for the regression analysis (paragraph [0077]) to yield a reliable and accurate prediction outcome. Neither D1 (US 2007/0222595 A1) nor D6 provided any indication to amass such comprehensive data. Furthermore, the method for gathering this substantial volume of data was neither obvious, nor feasibly executable on a general-purpose computer.

The appellant further argued that the predicted outcome could be used to control parts of the travel process system, such as expediting a baggage conveyor belt or averting congestion at check machines. By feeding back

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the prediction result into the system, e.g. through the activation or deactivation of certain check machines, transportation efficiency could be enhanced and energy consumption reduced.

8. Following the reasoning of T 1148/18 - Travel process prediction/THE AQUA ENTERPRISE COMPANY (see reasons, points 3 to 5), which concerns the parent application, the Board judges that predicting the arrival or passage time of a traveler or baggage at a specific location based on historical data does not constitute a technical activity.

This task is performed by a person skilled in applying statistics to logistics and travel planning, rather than a technically skilled person. It encompasses tasks like parameter selection, choosing the prediction algorithm such as regression analysis or deciding on the applicable statistical tests. The latter also involves determining significance levels based on statistical distribution tables such as the chi-square distribution (see paragraph [0101]).

Notably, in the present case, the selection of parameters is not driven by technical considerations, such as their measurement or any technical effects resulting from the selection. Even if this were disclosed in the description, this aspect is not reflected in the claim, which, in the broadest interpretation, merely specifies the (manual) input of passage time and other non-technical data like flight and weather information.

The claimed means essentially outline the objective of the statistical analysis - namely collecting and storing data and using this data to perform a - 9 - T 2367/22

statistical calculation which could be as simple as calculating the mean value of a set of numbers like the passage time.

Moreover, the claim does not define any feedback mechanism using the prediction to control the transportation system. This is, for example, different from D6 where, based on the actual location of baggage, the prediction is used to indicate an actual state of the baggage such as being late or on time (see point 25 below).

As outlined in T 1148/18, supra, reasons, point 5, in line with established jurisprudence the skilled person is given the task of implementing the statistical calculation. The claim defines that this is accomplished through means for inputting, storing, retrieving and calculating data. These means are inherent in any general-purpose networked computer system and, since no technical specifics are provided, the Board concludes that the computer implementation of the claimed prediction method is obvious.

9. The Board sees no contradiction with the passages of the Guidelines for Examination cited by the appellant. Section G-II, 3.3, which addresses mathematical methods, specifies that these methods make a technical contribution only if "in the context of the invention, [they] produce[s] a technical effect serving a technical purpose". This can occur, for instance, when they control an X-ray apparatus, are used for deriving indirect measurements, or are "adapted to a specific technical implementation" such as assigning the execution of certain method steps to a GPU or implementing a fast Fourier transform in a non-obvious manner.

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Neither of these scenarios applies to claim 1. It essentially covers the concept of predicting a mean time for a travel object, like a person passing through a designated point, such as an exit gate at an airport. The Board judges that, in the case at hand, a travel time prediction does not yield any technical effect serving a technical purpose, and the implementation merely involves programming the statistical method on a general-purpose computer.

Therefore, in line with established jurisprudence, factors like algorithmic efficiency, reliability or accuracy of the mathematical method in comparison to other prior-art mathematical methods are immaterial and, thus, not suitable to establish a technical effect.

10. In the latest response, the appellant argued that "the Board does not seem to fully understand the principle of the computerized statistical prediction technology".

Consequently, it was imperative to refer to the description and accompanying Figures, which elucidated the technical meaning of the claims in defining "unique configurations and implementation in a computer". The description, for instance, highlighted the verification of a travel object's actual passage through a checkpoint, a detail not found in D6.

11. The Board judges that, as previously mentioned, the claim covers simply computing the mean value of data. Even if the statistical calculations were delineated in intricate detail, potentially being complex and challenging to comprehend, this would not alter the Board's conclusion that these calculations, in the

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present context, do not make a technical contribution to the invention.

Furthermore, the system for gathering and processing data does indeed incorporate check machines for ID reading and, in case of failure, executing error-handling procedures like recording error data or blocking passage (see paragraphs [0042] to [0045]). This system undoubtedly transcends the capabilities of a general-purpose computer. However, these features are absent from the independent claims of the main request and, as such, are immaterial to the evaluation of inventive step.

12. For these reasons, the Board judges that the invention in claim 1 of the main request lacks an inventive step (Article 56 EPC).

Auxiliary requests 1 to 21, inventive step (Article 56 EPC)

- 13. Auxiliary request 9 is the most limited among auxiliary requests 1 to 9. The Board finds it thus convenient to analyse this request first.
- 14. In essence, claim 1 adds two features to claim 1 of the main request:
 - A. a means configured for checking a passage of a travel object.
 - B. a means configured for storing an explanatory text which explains a result of a statistical calculation and which is associated with a feature of information used in the statistical calculation and a result of the statistical calculation;
 - a means configured for extracting the explanatory

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text in accordance with the feature of information actually used in the statistical calculation and the result of the actual statistical calculation; and an output means configured for processing the calculated estimate value and the extracted explanatory text for outputting from the output means.

- 15. The appellant argued that feature A was not known from D6. In D6, the readers of the check machines were only capable of detecting a baggage tag and sending a location-update message, which included the date and time, to a server. In contrast, the claimed system determined whether a travel object had physically passed through a checkpoint. This "passed or not" data was employed as an additional parameter in the statistical calculation, specifically to mitigate potential errors in data collection.
- 16. However, in the Board's view, although the description does indeed elaborate on various checks performed by check machines (see page 13 of the appellant's latest reply), these are not defined in the claim. Thus a general-purpose networked computer system remains an appropriate starting point for assessing inventive step.

In its broadest interpretation, feature A could encompass actions like ticking a box when a traveler passes through a passage point. One might even argue that this feature is implicit in recording a passage time, as it signifies that the traveler has indeed crossed the passage point.

In any case, the Board maintains that feature A, even if incorporated into the statistical calculation, lacks technical character and therefore does not contribute

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to the presence of an inventive step.

17. Feature B pertains to the storage, retrieval, and presentation of an explanatory text, which explains the outcomes of the statistical computations.

The Board concludes that this feature does not provide a technical effect for the reasons given in T 1148/18, supra, reasons, point 10. Furthermore, the Board cannot see how a text explaining a non-technical aspect, namely a predicted travel time, could constitute a technical element. This is in contrast to a text that explains a technical aspect, such as the internal state of a machine, which could potentially confer a technical effect.

- 18. The appellant argued that the claim should be considered in its entirety, emphasising that the explanatory text offered guidance on utilising the calculation results. For example, the capital letters shown in Figure 19, such as ADVICE T, could be used by an operator for controlling check machines to save energy, increase efficiency of transportation and avoid congestions.
- 19. The Board observes that the appellant's interpretation lacks any supporting examples or indications in the application.

Moreover, this argument exemplifies what is commonly referred to as the "broken technical chain fallacy," as articulated in T 1670/07 - Shopping with mobile device/NOKIA, reasons, point 11, in which the purported technical effect hinges on the intervention or mental activities of the operator.

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Additionally, the fact that the explanatory text may refer to a period of data collection — such as noting the absence of data for a specific month — does not constitute a technical aspect. A statistician would recognise that during such a period conducting regression analysis is infeasible. Similarly, when utilising data from winter months, it's understood that the prediction for summer months might be less precise. These considerations are inherently within the realm of statistics, a domain that, in itself, lacks a technical nature and is ineligible for patentability.

- 20. For these reasons, the Board judges that the invention in claim 1 of auxiliary request 9 lacks an inventive step (Article 56 EPC).
- 21. For similar reasons also auxiliary requests 1 to 8 and 10 are not inventive (Article 56 EPC).

Specifically, auxiliary request 10 essentially mirrors auxiliary request 6, with the modification being the substitution of "an estimate value of passage time" with "a **statistical** estimate value of passage time" (emphasis added by the Board).

When assessing inventive step of the main request, the Board has already construed the prediction as relying on a statistical calculation.

22. Auxiliary requests 11 to 21 differ from auxiliary requests 1 to 10 in the rephrasing of independent claims 4 to 9 and 13 to 18 as dependent claims.

Therefore, these requests lack an inventive step for the same reasons (Article 56 EPC).

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Auxiliary request 22, inventive step (Article 56 EPC)

- 23. Auxiliary request 22, with the sole alteration of substituting "predicting" with "statistically predicting" in claim 1, mirrors the previously refused auxiliary request 22. The latter request is based on refused auxiliary request 21 and introduces a new independent claim 1 that provides a more detailed specification of the travel process prediction system.
- As illustrated in Figure 1, this system encompasses a travel process prediction apparatus (1) responsible for executing the statistical calculations, check machines (21) tasked with detecting passages and recording corresponding passage times, an information acquiring apparatus (2) responsible for storing passage time data received from the check machines, a transportation information storing apparatus (4) dedicated to storing flight details, a weather information storing apparatus (5) designated for storing weather data, an input/output device (7) for presenting prediction results, and a communication network (N) that interconnects all the devices.
- 25. It is common ground that D6 is a suitable starting point for assessing inventive step.

In D6, although not utilised for predicting travel time as in the present invention, the system predicts the travel time of baggage when it moves from a first reader to a second reader - see paragraph [0032]. Additionally, this prediction, coupled with flight information pertaining to the tracked baggage, is used to trigger an alert if the baggage is deemed lost, misdirected, or delayed. A central server maintains a table containing transit time data for every

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conceivable combination of readers (paragraph [0033]). D6 does not mention how this data is obtained. However, the Board believes that it must be rooted in historical data, such as the average passage time of baggage or similar metrics.

Unlike in some other jurisdictions, the established approach at the EPO allows for the inclusion of non-technical requirements in defining the problem (see e.g. Case Law Book, 10th edition 2022, I.D.4.2). Therefore, starting from the system in D6, the skilled person is tasked with implementing the aforementioned non-technical requirement, specifically the statistical method for predicting travel time (see point 7). This also encompasses the incorporation of weather data as an additional input parameter (see also T 1798/13 - Forecasting the value of a structured financial product/SWISS REINSURANCE COMPANY LTD, reasons, point 2.15).

The Board judges that it would have been obvious for the skilled person to adapt the system in D6 for the intended purpose. This involves storing already available passage time data and other parameters like flight and weather information, retrieving this data, and conducting the necessary statistical calculations. This is particularly apparent given that the claim does not specify any non-obvious technical concepts or implementation details.

- 26. The Board, thus, concurs with the examining division's finding that claim 1 of auxiliary request 22 is not inventive over D6 (Article 56 EPC).
- 27. Incidentally, the Board observes that claim 1 is arguably unclear. This is due, in part, to its

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definition of an apparatus for storing flight and weather information without offering further clarification on how this data is utilised. Throughout the preceding analysis, the Board has assumed, in favour of the appellant, that the flight and weather data is transmitted via the network to the prediction apparatus and subsequently employed for statistical calculations.

- 28. The appellant argued that incorporating weather data improved the accuracy of the prediction (see paragraph [0117]). It was not obvious, without the benefit of hindsight, to introduce this structural feature to D6 which solely indicated the use of a table to verify the status of baggage.
- 29. The Board notes that prediction accuracy is a characteristic inherent to the algorithm and data employed. Since in the case at hand neither of these elements makes a technical contribution, prediction accuracy cannot be deemed a technical effect.

As a rule, inherent properties of algorithms, such as computational efficiency or accuracy, when they do not serve a technical purpose and do not exceed a generic technical implementation, are not considered technical. Therefore, even if the utilisation of weather information as an additional input parameter were to enhance prediction accuracy, it would not contribute to the technical character of claim 1.

30. In the latest response, the appellant further argued that, unlike D6, the inventive system had the capability to verify whether a travel object was equipped with a tag or not (see paragraphs [0029] and [0045]). This functionality allowed the system to

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ascertain if it was in a correct state.

31. Firstly, this aspect is not claimed. Secondly, the Board fails to see how the invention's system, aside from reading a tag associated with the travel object, could determine its passage (time). Finally, this capability is also known from D6, which, through the use of tags and readers, facilitates the tracking of baggage and the verification of its status (see, for instance, paragraph [0042]).

Auxiliary requests 23 to 26, inventive step (Article 56 EPC)

32. Auxiliary requests 23 to 26 have been newly filed on appeal. These requests, with the exception of the inclusion of the phrase "in relation with movement of the travel object", mirror auxiliary requests 23 to 26, which were not admitted by the examining division under Rule 137(3) EPC. These latter requests are essentially based on the main request and auxiliary requests 1, 6 and 7, except for some linguistic rewording.

The reasons for their non-admittance was that the feature "a means for detecting an arrival, passage or departure of a travel object by a sensor" infringed the provisions of Article 123(2) EPC and that they were filed belatedly.

33. The Board cannot see that the appellant's cited basis (Figure 1, paragraphs [0029], [0030], [0032], [0051], and [0056]) directly and unambiguously discloses the amendment. In any case, there is no literal basis for the amendment, as argued by the examining division (see point 21.1 of the decision).

Nonetheless, the Board judges that the added feature,

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despite any potential clarity concerns stemming from the accompanying phrase "in relation with movement of the travel object", is known from D6 (see paragraph [0031]: "... readers 12 are set up as 'check-points' along the baggage travel path 13 from check-in 14 at the origin of the trip to pick-up 15 at the destination end of the trip").

Therefore, the Board concludes that none of the auxiliary requests 23 to 26 are allowable due to a lack of inventive step (Article 56 EPC).

Auxiliary request 27, admissibility (Article 12(6) RPBA)

34. Auxiliary request 27 was not admitted into the examination proceedings under Rule 137(3) EPC.

The reasons were that the request was filed late and not clearly allowable, since prima facie it did not meet the requirements of Article 123(2) EPC. In addition, the applicant already had been granted the opportunity to submit numerous requests.

More specifically, the examining division found that the basis indicated by the applicant, that is Figures 1 (item 21) and 5 and paragraphs [0028], [0029] and [0044], was the same as those given for auxiliary request 21, yet they did not pertain to the amendment introduced in claim 1 of auxiliary request 27. Notably, the cited passages did not encompass the feature "transmitting ... transportation specifying information and situation information".

35. During the oral proceedings before the Board, the appellant further argued that a basis for this amendment could be found in paragraphs [0035], [0037]

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and [0056] and in Figures 2 and 7. Notably, Figure 2 depicted that the information acquiring apparatus stored passage point, event history and travel process data which was subsequently transferred to the prediction apparatus.

36. The Board notes that, since auxiliary request 27 was not admitted in the first instance proceedings, its admittance into the appeal proceedings is governed by Article 12(6) RPBA.

Article 12(6) RPBA states that the Board shall not admit requests, facts, objections or evidence which were not admitted in the proceedings leading to the decision under appeal, unless the decision not to admit them suffered from an error in the use of discretion or unless the circumstances of the appeal case justify their admittance.

The Board reads the first condition of this provision in that "error" has to be one existing at the time of applying the discretion. Thus, even if the basis provided by the appellant during the oral proceedings before the Board were deemed convincing, which, in the Board's view, is not the case, it is the basis given to the examining division that is decisive.

37. The Board judges that, in fact, the amendment is not directly and unambiguously derivable from that basis. It did not relate, as rightly noted by the examining division, to the transfer of data from the acquiring to the prediction apparatus, let alone the transfer of "passage time ..., transportation specifying information and situation information".

Moreover, the appellant did not present any specific

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circumstances that would warrant the admittance of auxiliary request 27 on appeal under the second condition of Article 12(6) RPBA. The Board does not discern any such circumstances either.

In view of the above, the Board concludes that the examining division exercised its discretion correctly and, consequently, finds no grounds to admit auxiliary request 27 into the appeal proceedings (Article 12(6) RPBA).

Auxiliary requests 28 to 43, admissibility (Article 13(2) RPBA)

- 38. Auxiliary requests 28 to 43 were filed in response to the Board's preliminary opinion and, thus, under Article 13(2) RPBA are only admitted if there are exceptional circumstances, which have been justified with cogent reasons by the appellant.
- 39. The appellant argued that they were able to submit these requests only after having received "concrete opinions from the Board", as outlined in its preliminary opinion.
- 40. The Board notes that the introduced amendments prima facie give rise to new objections under Article 123(2) EPC and are not suitable to overcome the inventive step objection raised in relation to the preceding requests.

First and foremost, the inclusion of the phrase "based on the normal distribution, t-distribution, f-distribution or chi-square distribution" in all of these requests is not directly and unambiguously derivable from the original disclosure. Statistical distributions are only mentioned in the context of data transformation (paragraph [0075]) and for determining

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statistical significance (see paragraphs [0095] and [0101] to [0109]). However, this is different from calculating an estimated passage time using regression analysis, as claimed.

Secondly, the added features relate to the statistical calculation method and, as such, are not pertinent to the assessment of inventive step (see point 8 above).

- 41. The appellant argued that the mentioned statistical distributions influenced the steps performed by the prediction apparatus (see Figure 16, items S603, S604 and paragraphs [0094], [0102] or [0107]) and, consequently, contributed to a technical effect.
- 42. However, this argument lacks persuasiveness, as the prediction apparatus simply executes the statistical calculations in line with its intended function. This encompasses steps related to determining a statistical difference between mean/variance values of various samples/populations and computing confidence intervals based on them. All of this falls within the realm of non-technical matters, not yielding any additional technical effect, and hence, is not pertinent to the assessment of inventive step.
- 43. The Board concludes that the appellant's arguments for filing auxiliary requests 28 to 43 at this late stage of the proceedings do not represent exceptional circumstances justified by cogent reasons. Furthermore, these amendments not only introduce additional objections, but also fail to address the inventive step objection.

As a result, the Board decides not to admit auxiliary requests 28 to 43 into the appeal proceedings under

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Article 13(2) RPBA.

44. As none of the requests is allowable the appellant's request for remittal must be rejected.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:



T. Buschek W. Chandler

Decision electronically authenticated