Datasheet for the decision
of 4 July 2019

Case Number: T 1902/13 - 3.5.01
Application Number: 05706524.5
Publication Number: 1649420
IPC: G06Q10/00
Language of the proceedings: EN

Title of invention:
COMPUTER-BASED METHOD FOR ASSESSING COMPETENCE OF AN ORGANIZATION

Applicant:
Swiss Reinsurance Company Ltd.

Headword:
Assessing competence levels/SWISS RE

Relevant legal provisions:
EPC Art. 56, 111(1)

Keyword:
Inventive step - assessing the competence of an organisation by processing score data (no - obvious implementation of a business method)
Decisions cited:
T 1194/97, T 0641/00, T 0258/03
Case Number: T 1902/13 - 3.5.01

DECISION
of Technical Board of Appeal 3.5.01
of 4 July 2019

Appellant: Swiss Reinsurance Company Ltd.
(Applicant)
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Decision under appeal: Decision of the Examining Division of the European Patent Office posted on 16 May 2013 refusing European patent application No. 05706524.5 pursuant to Article 97(2) EPC.

Composition of the Board:
Chairman W. Chandler
Members: M. Höhn
C. Schmidt
Summary of Facts and Submissions

I. This appeal is against the decision of the examining division refusing European patent application No. 05706524.5 pursuant to Article 97(2) EPC on the ground of lack of inventive step (Article 56 EPC).

II. In the statement setting out the grounds of appeal, the appellant requested that the appealed decision be set aside and that a patent be granted on the basis of the attached main or auxiliary request. Oral proceedings were requested on an auxiliary basis.

III. In the annex to the summons to oral proceedings, the Board expressed its preliminary opinion that both requests lacked inventive step (Article 56 EPC).

IV. With letter dated 4 June 2019 the appellant submitted amended requests with arguments in favour of inventive step.

The appellant requested that the decision under appeal be set aside and that the case be remitted to the examining division for further prosecution on the basis of the request submitted with letter dated 4 June 2019 as "Anhang A" (main request), or, alternatively, to grant the patent on the basis of this main request (first auxiliary request) or on the basis of "Anhang B" (second auxiliary request), also filed with letter dated 4 June 2019.

V. Oral proceedings were held on 4 July 2019. After due consideration of the appellant's arguments the Chairman announced the decision.
VI. Independent claim 1 according to "Anhang A" (main request) reads as follows:

"1. A computer-based method for assessing competence of an organization comprising multiple organizational units by computer means (1), the method comprising:

capturing, receiving and storing answer-data by the computer (1) to subsets of predefined questions stored in a memory (12) which are assigned and activated as subsets of the predefined questions based on organizational aspects of a selected organizational unit automatically by the computer (1) based on an organizational unit profile stored in the memory (12);

rating automatically by the computer by means of a rules based expert system the stored content data providing scores to the predefined questions:

storing the scores, in the memory device (12) of the computer (1) corresponding to the answer data from each of the organizational units in response to the set of defined questions, the organizational units corresponding to different groups of individuals, and each of the different groups performing a different function within the organization:

assigning, in the computer (1), each of said scores to the respective one of the organizational units, wherein the scores assigned to the captured answer data are weighted with weighting factors before being stored in the memory (12), the weighting factors being determined by the computer (1) based on the organizational unit and the predefined questions assigned to the respective score from a table containing weighting factors.
assigned to organizational units and to the predefined questions;

calculating, in the computer (1), total scores for the organizational units, each of the total scores being calculated by adding up the scores assigned to the respective organizational unit;

calculating, in the computer (1), weighted total scores (71/81) for the organizational units, each of the weighted total scores (71/81) being calculated individually for the various organizational aspects by adding up weighted maximum scores assigned to the activated questions and to the organizational unit for each organizational unit, the weighted maximum scores each depending on the respective organizational unit and the respective question;

calculating, in the computer (1), competence levels of the organizational units that are scaled to a scale of competence (72/82) defined by a numerical range of zero to a maximum competence value (73/83/84) by multiplying the maximum competence value by a ratio of the total score calculated for the respective organizational unit to the weighted total score (71/81) calculated for the respective organizational unit;

generating a graphical representation (7/8) of the competence levels calculated for the organizational units in one common graph by means of a polygon-shaped spider diagram, each of the vertices being assigned to one of the organizational units; and

displayed the graphical representation (7/8) by means of display (3) so that the competence levels are visualized and so that deficiencies of the competence
levels from the maximum competence are visualized, and so that differences between the competence levels of the organizational units are visualized."

Claim 1 according to "Anhang B" (auxiliary request) reads as follows:

"1. A computer-based method for assessing competence of an organization comprising multiple organizational units, the method comprising:

storing scores, in a memory device (12) of a computer (1) corresponding to answers from each of the organizational units in response to a set of defined questions, the organizational units corresponding to different groups of individuals, and each of the different groups performing a different function within the organization;

assigning, in the computer (1), each of said scores to the respective one of the organizational units;

calculating, in the computer (1), total scores for the organizational units, each of the total scores being calculated by adding up the scores assigned to the respective organizational unit;

calculating, in the computer (1), weighted total scores (71/81) for the organizational units, each of the weighted total scores (71/81) being calculated by adding up weighted maximum scores assigned to the questions for each organizational unit, the weighted maximum scores each depending on the respective organizational unit and the respective question;
calculating, in the computer (1), competence levels of the organizational units that are scaled to a scale of competence (72/82) defined by a numerical range of zero to a maximum competence value (73/83/84) by multiplying the maximum competence value by a ratio of the total score calculated for the respective organizational unit to the weighted total score (71/81) calculated for the respective organizational unit;

generating a graphical representation (7/8) of the competence levels calculated for the organizational units in one common graph by means of a polygon-shaped spider diagram, each of the vertices being assigned to one of the organizational units;

displayed the graphical representation (7/8) by means of display (3) so that the competence levels are visualized and so that deficiencies of the competence levels from the maximum competence are visualized, and so that differences between the competence levels of the organizational units are visualized; and

indicating steps and areas of possible improvements by means of the computer, if the competence level of an organizational unit is below a defined threshold, wherein the steps and areas of possible improvements are determined by means of a rule-based expert system retrieving the steps and areas of possible improvements from a table stored in the memory device (12) depending on the scores assigned to the questions related to the respective organizational aspect."

VII. The appellant criticised the examining division's approach of assessing inventive step in the contested decision and argued essentially that the problem of simply making a faster assessment of competence levels
of an organisation was chosen in a too trivial manner and the assessment was based on hindsight. The resulting technical effect according to the description of the application was reduced to a mere interpretation of a graphical representation by a human. In contrast thereto, the invention required technical considerations of scaling down multidimensional quantities and the combination of technical features was non-obvious. Further details regarding the appellant's arguments can be found in the reasons for the decision.

Reasons for the Decision

1. Background of the invention

The present invention is directed to a computer-based method for assessing competence levels of an organisation comprising multiple organisational units as conventionally assessed by business consultants. A computer stores scores related to answers given by a human representative of organisational units in response to defined questions. The computer assigns each score to one of the organisational units. For the organisational units, total scores are calculated in the computer by adding up the scores assigned to the respective organisational unit. Moreover, the computer calculates weighted total scores for the organisational units by adding up weighted maximum scores assigned to the questions. The weighted maximum scores each depend on the respective organisational unit and the respective question. Finally, the computer calculates competence levels of the organisational units. The
results are provided by generating a graphical representation. The auxiliary request adds the use of a rules-based expert-system.

Claims according to "Anhang A"

2. Technical character

2.1 The claims are directed to a mix of technical and non-technical features. The Board does not dispute that the methods according to claims 1 and 8 appear in a technical context. The methods can be considered to be performed by technical means, because they involve a computer with means for storing data, means for processing data and means for transmitting and receiving data, and, therefore, have technical character. Accordingly, the claimed subject-matter is an invention in the sense of Article 52(1) EPC (see T 258/03 "Auction method/HITACHI").

3. Article 56 EPC - Inventive step

3.1 However, the question of inventive step requires an assessment of whether the invention makes a technical contribution over the prior art. Features which do not make such a contribution cannot support the presence of an inventive step (see T 641/00 "Two identities/COMVIK", Headnote I).

3.2 The Board agrees with the contested decision that except for the features relating to the technical infrastructure of a general purpose computer system, the features pertain to an administrative method, i.e. to the non-technical part of claim 1 and claim 8. Thus, the assessment of inventive step in the decision under appeal correctly considered a notoriously known general
purpose computer system to be the closest prior art (see points 2 and 10 of the decision). Such a general purpose computer system was capable of storing, assigning, weighting, calculating and presenting all kinds of data. The claims as well as the description of the application lack technical detail with regard to the claimed computer system. Consequently, the Board does not find a specific disclosure of any technical aspect that could distinguish the computer system, on which the claimed method is based, from such a general purpose computer system.

3.3 Designing questions for determining competence levels and method steps and decisions leading thereto as well as mathematical/statistical operations of weighting, scaling and norming are all in the non-technical domain of an economist or a business person (Article 52(2)(a) and (c) EPC) and do not make an inventive technical contribution. The parameters resulting from those questions are considered to be non-technical, i.e. cognitive data.

A business consultant, who wants to assess the competence of an organisation would design a set of rules and questions, which can be reused for another organisation. In order to present meaningful results, e.g. on a flip-chart using graphical diagrams like well known spider diagrams, the business consultant would have to transform the answers into numerical values, scale and weight them. No computer would be needed for performing these tasks. The more dimensions the quantities require, the more cumbersome and time consuming these tasks would be. According to the invention, parts of the process are therefore automated using a computer system. However, the computer system would still follow the same principles as the business
consultant following the underlying administrative concept according to the set of rules and questions. The Board does not agree with the appellant's argument put forward during oral proceedings, that the business person and the skilled programmer would have to sit together in order to elaborate a workable solution. Rather the underlying administrative concept following the traditional business consultant approach would be provided to the programmer as a requirements specification.

3.4 The Board does not see how the claimed invention can automatically initiate decisions ("automatische Initierung von Verfahrensentscheidungen") as argued by the appellant (see page 5, last paragraph of the grounds). Every decision concerning what to do in order to improve competence has to be taken by a human interpreting the diagrams or the data in general. There is no automation in this regard and this goes beyond what is covered by the independent claims.

The application discloses "Generally, questions with assigned low scores will determine the steps and areas of possible improvements. For example, computer 1 retrieves the steps and areas of possible improvements from a table stored in memory 12. Preferably, the steps and areas of possible improvements are determined by means of an expert system" (see the paragraph bridging pages 15 and 16).

However, no detailed technical disclosure of an expert system is found in the application, in particular how it has to be implemented. The knowledge and rules on which such an expert system is based, are considered to be part of the non-technical business related concept, which are part of the requirement specification (see
point 3.3 above). The computer follows the same rules and questions that were designed by the business consultant. There is no added value in the decision making process caused by the computer means except for automation of calculations for scaling and weighting the values corresponding to the answers.

3.5 The contribution of the invention also does not lie in an improved man-machine interface as argued by the appellant with regard to a graphical representation. The man-machine interface used according to claim 1 is that of a general purpose computer which was notorious knowledge before the priority date. The contribution lies rather in the way of associating information with collected competence related data. Such data, however, in the Board's view, is not technical, since it is cognitive data, not functional data (see T 1194/97 Data structure product/PHILIPS, OJ EPO 2000, 525). Storage, selection and processing of such data is an administrative measure, such as would be performed by a human when designing questions and assessing competence levels, implemented in a straight-forward manner making use of general purpose computer functions (e.g. storing and retrieving information and displaying content in electronic form) without creating a further technical effect.

3.6 The appellant further argued that generating a graphical representation constituted a technical contribution. The Board does not agree. The appellant specifically referred to spider diagrams. The application discloses "preferably in the form of a so-called spider diagram" (see the sentence bridging pages 14 and 15). This clearly shows that such diagrams were already known and widely used when graphically presenting multiple parameters in one diagram. The
Board agrees with the contested decision that the effects are in the subjective and mental area of presentation of information. The Board doubts that the kind of a diagram like a spider diagram contributes to the technical character. However, it would be an obvious choice for graphically presenting multiple parameters in one diagram for human interpretation and decision making. This feature therefore does not provide an inventive technical contribution.

3.7 The fact that the steps of storing, assigning, calculating and weighting/scaling/norming are performed automatically is regarded as technical, but an obvious consequence of using a computer system.

3.8 The Board therefore agrees with the decision under appeal that the closest prior art can be considered to be a general purpose networked computer (see point 2 of the decision), which was generally known before the priority date.

3.9 However, the Board does not agree with the examining division that the underlying technical problem is simply making a faster assessment of competence levels of an organisation. The problem to be solved is rather the implementation of the claimed business-related concept of assessing competence levels on such a general purpose networked computer.

The person skilled in the art within the meaning of Article 56 EPC, a computer expert provided with the complete description of the non-technical abstract administrative concept, would have considered the claimed implementation obvious in view of the normal skills and the general knowledge of computer programming.
3.10 The technical features according to claim 1 referring to a computer (automatically by a computer, stored in a memory, determined by the computer, storing by the computer etc.) are commonplace. The appellant was not able to indicate a technical feature that goes beyond what a general purpose computer system comprises. The Board also does not agree with the appellant's argument, that the combination of these features was non-obvious. The appellant did not provide convincing arguments showing what such a combinative effect could be according to claim 1, that goes beyond the normal effects caused by each individual known technical feature. No further technical effect could be identified.

3.11 The appellant's arguments to the contrary in the written procedure as well as during oral proceedings therefore do not convince for the aforementioned reasons.

Claims according to "Anhang B"

4. Independent claim 1 of "Anhang B" is phrased differently, but it is essentially directed to the same subject-matter. As far as the additional features of claim 1 of "Anhang B" are concerned, the appellant has not provided detailed arguments neither with the statement setting out the grounds of appeal nor with the letter dated 4 June 2019.

4.1 No detailed technical disclosure of an expert system is found in the application, which distinguishes the claimed expert system from known expert systems except for the knowledge base, i.e. the rules, which however,
are not considered to involve an inventive technical contribution (see points 3.3 and 3.4 above). The other added features of claim 1 of this request are part of the underlying administrative concept given to the programmer for implementation for the same reasons given above (see in particular points 3.8 to 3.10).

5. The same reasoning applies to corresponding independent method claim 8 of both "Anhang A" and "Anhang B".

6. In the absence of anytechnical contribution beyond the straight-forward computer-implementation, the subject-matter of claims 1 and 8 of neither "Anhang A", nor "Anhang B" involves an inventive step (Article 56 EPC).

7. Main request and first auxiliary request

Since the subject-matter of claims 1 and 8 of "Anhang A" does not fulfill the requirements of Article 56 EPC, there is no need for the Board to remit the case under Article 111(1) EPC as per the main request. The claims cannot be granted either as per the first auxiliary request.

8. Second auxiliary request

The subject-matter of claims 1 and 8 of "Anhang B" does not fulfill the requirements of Article 56 EPC, either, for the reasons given above.

**Order**

**For these reasons it is decided that:**

The appeal is dismissed.
The Registrar: T. Buschek

The Chairman: W. Chandler

Decision electronically authenticated