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**Datasheet for the decision
of 11 April 2024**

Case Number: T 3104/19 - 3.4.03

Application Number: 12775827.4

Publication Number: 2754108

IPC: G06Q10/10, G06F17/30

Language of the proceedings: EN

Title of invention:

SYSTEM FOR AND METHOD OF ESTIMATING THE CHEMICAL COMPOSITION
OF AN ARTICLE

Applicant:

GRANTA DESIGN LIMITED

Headword:

Relevant legal provisions:

RPBA Art. 12(4)

EPC Art. 56

Keyword:

Inventive step - main request (no) - obvious automation of an
administrative method

Auxiliary request - admitted (no) - should have been filed in
examination proceedings

Decisions cited:

Catchword:



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Case Number: T 3104/19 - 3.4.03

D E C I S I O N
of Technical Board of Appeal 3.4.03
of 11 April 2024

Appellant: GRANTA DESIGN LIMITED
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Representative: Gill Jennings & Every LLP
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Decision under appeal: **Decision of the Examining Division of the
European Patent Office posted on 2 July 2019
refusing European patent application No.
12775827.4 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman T. Häusser
Members: M. Papastefanou
D. Prietzel-Funk

Summary of Facts and Submissions

- I. The appeal is against the decision of the examining division refusing European patent application No. 12 775 827 (published as WO 2013/034905 A1). The decision was a so-called "Decision on the state of the file" issued at the request of the then applicant (now appellant), in which the examining division made reference to its communication dated 12 February 2019 (issued as annex to the summons to oral proceedings), including objections of lack of inventive step against the claims then on file.
- II. The appellant requested in writing that the decision under appeal be set aside and, as a main request, that a patent be granted on the basis of the claims underlying the decision (claims 1 to 16 filed with letter dated 21 October 2014). In the alternative, the appellant requested that a patent be granted on the basis of the first auxiliary request filed with the statement setting out the grounds of appeal.
- III. After the board issued summons to oral proceedings and its preliminary opinion, the appellant informed the board that it would not be attending the oral proceedings. The board subsequently cancelled the oral proceedings and issues its decision in writing.
- IV. Claim 1 of the main request is worded as follows:

*A system (100) for indicating the presence of a substance in an article, wherein the article comprises at least one component, the system (100) comprising:
means for selecting a substance;
a component data unit (3) for providing component*

data wherein the component data comprises at least one material comprised in each component;

a primary material records unit for providing a plurality of primary material records;

a secondary material records unit (5) for providing a plurality of secondary material records;

a substance record unit (4) for providing a plurality of substance records associated with a material, wherein each substance record contains percentages of substances contained in the associated material; and

a processor configured to:

select material records of the at least one material from the primary material records unit if the at least one material is present in the primary material records;

select material records corresponding to the at least one material from the secondary material records unit (5) if no substance records associated with the at least one material are present in the substance record unit (4);

calculate the total amount of the selected substance present in the article based on the component data, selected material records, and substance records; and

provide an indication of the total amount of the selected substance.

- V. Claim 1 of the first auxiliary request is worded as follows (differences from claim 1 of the main request underlined and struck through by the board):

A system (100) for ~~indicating the presence of a substance in an article~~ responding to a consumer request for sufficient information for safe use of an article which contains a Substance of Very High

Concern, SVHC, as defined by the candidate list under the European Community Regulation on Chemicals, within 45 days, wherein the article comprises at least one component, the system (100) comprising:

means for selecting a substance wherein the selected substance is an SVHC;

a component data unit (3) for providing component data wherein the component data comprises at least one material comprised in each component;

a primary material records unit for providing a plurality of primary material records;

a secondary material records unit (5) for providing a plurality of secondary material records;

a substance record unit (4) for providing a plurality of substance records associated with a material, wherein each substance record contains percentages of substances contained in the associated material; and

a processor configured to:

select material records of the at least one material from the primary material records unit if the at least one material is present in the primary material records;

select material records corresponding to the at least one material from the secondary material records unit (5) if no substance records associated with the at least one material are present in the substance record unit (4);

calculate ~~the~~ an estimated total amount of the selected substance present in the article based on the component data, selected material records, and substance records; ~~and~~

determine whether the estimated total amount of the selected substance in the article exceeds a predetermined threshold;

if the estimated total amount exceeds the

predetermined threshold, provide an indication of that the total amount of the selected substance in the article may exceed the predetermined threshold and that a declaration of production materials may be required from a supplier of a component of the article;

store component data of the declaration in the component data unit (3); and

determine whether the estimated total amount of the selected substance in the article still exceeds the predetermined threshold, taking into account the component data of the declaration.

- VI. The appellant argued essentially that indicating the presence of a substance in an article was an inherently technical problem, which the claimed system solved. Neither the system nor the way it solved the technical problem were notorious or obvious to the skilled person.

Reasons for the Decision

1. Procedural matters
 - 1.1 The board summoned the appellant to oral proceedings to be held on 18 January 2024, as it had conditionally requested (see Notice of Appeal and last sentence of the statement setting out the grounds of appeal).
 - 1.2 On 12 September 2023 the board issued a communication under Article 15(1) RPBA 2020 conveying its preliminary opinion according to which the subject-matter of claim 1 of the main request did not involve an inventive step. Moreover, the board informed the appellant that it was minded not to admit the first auxiliary request into the proceedings under Article

12(4) RPBA 2007. In addition, claim 1 of this request was considered unclear and not inventive.

1.3 With a letter dated 18 December 2023 the appellant commented on some aspects of the board's preliminary opinion and with a letter dated 11 January 2024 the appellant informed the board that it would not be attending the scheduled oral proceedings.

1.4 The duly summoned appellant thus decided on its own volition to forego the opportunity to present its case orally before the board. According to Article 15(3) RPBA 2020, the board shall not be obliged to delay any step in the proceedings, including its decision, by reasons only of the absence of a party at the oral proceedings.

Moreover, the board is convinced that the case is ready for decision (Article 15(6) RPBA 2020) and, since the sole party involved was not going to attend the oral proceedings, it cancelled them because they served no purpose.

2. The claimed invention

2.1 The invention relates to a system and a method for indicating the presence of a substance in an article.

In the context of the invention an article (or assembly) of manufacture (e.g. an aeroplane, an engine, etc.) consists of one or more components (or sub-assemblies). Each component is composed of one or more materials and each material is in turn composed of one or more substances.

2.2 The system of the invention calculates the total amount of a selected substance in an article using information related to the compositions of the components and materials of the article. The aim is to identify if the selected substance is present in the article in a quantity (amount) that may exceed legally set thresholds, such as a substance which may be considered dangerous for the public according to certain regulations if it is present in the article in a certain quantity.

3. Main request - inventive step

3.1 Starting point for the skilled person's considerations is the conventional administrative procedure whereby information about the presence of certain substance(s) in the components of an article has to be requested and obtained from the corresponding component manufacturers/suppliers (see also page 1, line 29 to page 2, line 16 of the description of the application).

3.2 Instead of that procedure, the claimed system retrieves the relevant information from various record units, (e.g. databases), where information about the material and substance compositions of the component(s) of the article is stored.

3.2.1 Although this is not part of claim 1, it can be assumed that the information about which components constitute the article, as well as the dimensions (e.g. weight) of these components, is entered in advance into the system. According to the application, this is done manually by a user (see e.g. page 8, line 21 to page 9, line 16 of the description of the application). The same applies to the selection of the specific substance

for which the total amount is sought.

- 3.2.2 Once this information is provided to the system, it retrieves from various record units, which are to be understood as online data repositories (databases), information about which materials compose the component(s) and which substances compose those materials. The claim does not include any features relating to how this information became available to those record units, either. It may be supposed that some of the information is provided by the component manufacturers/suppliers to the corresponding record units. Other information, relating for example to the substance composition of standard materials may be available by other sources (see also page 4, line 18 to page 5, line 3 of the description).
- 3.2.3 Once the relevant information is retrieved, the system calculates the total amount of the substance in question. As an example, the article is taken to be an aeroplane engine, which comprises a component weighing 10 Kg. The retrieved information from the various record units shows that this component contains 50% of a material, which contains 50% of the selected substance. The system will calculate the total amount of the selected substance in the article, in that case 50% of 50% of 10 Kg, i.e. 2.5 Kg. This result will be indicated to the user.
- 3.2.4 In the board's view, the claimed system can be seen as a general purpose computer system with network capabilities, which retrieves data, executes a mathematical calculation based on these data and shows the result. In other words, the claimed system is considered to be general purpose computer (system) with network capabilities, which is able to perform the

basic operations of storage, retrieval and processing of data, as well as receiving input from and providing output to a user. It is common ground that such a computer was notoriously known to the skilled person at the priority date of the application.

- 3.3 The appellant argued that indicating the amount of a substance in an article was an inherently technical problem, which was solved by the claimed system.
- 3.3.1 The board notes that both the appellant and the application use the expressions "indicating the total amount of a substance in an article" and "determining the substance composition of an article" interchangeably. The board does not agree, however, that the latter expression is correct in the present context as the claimed invention expressly only provides an *indication* about the quantity of a specific (selected) substance in the article. Any other substances that the article may contain are not determined. Neither is the selected substance detected or determined in any way, as it is merely provided to the system by the user.
- 3.3.2 There is no measurement (e.g. weighing) or any analysis (chemical, spectral, etc.) which takes place in order to determine the substance(s) contained in the component of the article. The indicated total amount of the selected substance corresponds rather to the expected, theoretical amount, since it is based on information related to the theoretical compositions of the components and the materials included in the article and not on any actual measurements.
- 3.3.3 Hence, even if indicating the total amount of a substance or determining the material composition of an

article were considered technical problems, they are not solved using technical means by the claimed system.

3.4 The appellant also argued that using secondary material record units where material composition information could be retrieved in case the primary material record units did not contain any relevant information, also represented a technical solution to a technical problem.

3.4.1 According to the application (see e.g. Figure 2b), there can be cases where no information is available for the substance composition of a material, i.e. the primary record unit has no relevant information. In such a case the system will look for information relating to a similar material ("Fallback Link" in the Figure) for which the substance composition is available and retrieve the relevant information.

According to the appellant, this avoided that the claimed system could not provide any result when no information for a specific material could be found. This was a technical effect, because it guaranteed that the system would always function, i.e. that it would always be in a position to indicate a total amount of the selected substance.

3.4.2 The board does not find this argument persuasive.

Firstly, by using information related to a different material than the one contained in the component of the article, the system does not really indicate the presence/total amount of "a substance in an article", since it uses information related to another material which may not be contained in the component/article. Secondly, which material will be taken as "fallback

link" is also (to be) defined by the user, and neither the claim nor the application provide any indication as to how this "similar" material is (to be) selected. In the terminology of the claim, the selection of which secondary materials record unit will be consulted when a certain primary materials record unit contains no information is (to be) determined by the user. This selection seems to be arbitrary from a technical point of view.

The board's view is thus that no technical effect is obtained nor any technical problem is solved by those features. They rather represent an administrative/design decision aiming at obtaining a result (a total amount for the selected substance) irrespective of the lower accuracy or reliability of such a result. In any case, the indicated total amount of the selected substance corresponds merely to an expected, theoretical rather than a detected or measured amount.

- 3.5 In the application it is also stated that the claimed system "enables fast and effective use of resources, increasing safety for consumers and reducing the cost of compliance and risk assessment activities" (see the description, page 12, the first three lines).

According to the conventional administrative procedure described in the application, declarations on the presence of a candidate (selected) substance in the components/materials had to be requested and obtained from the corresponding suppliers, something that cost time, effort and money. In contrast to that, the claimed system used available information to determine the amount of a candidate (selected) substance itself and, if the amount was found to be over a set threshold, it would generate a report/declaration

itself (the latter aspect is not included in the system of claim 1 of the main request, which only indicates the calculated amount). The application also provides a cost analysis intended to show the savings achieved with the use of the claimed invention in comparison with the conventional procedure (see Figures 5 and 6).

3.5.1 As explained earlier, the board considers that the component/material/substance information is provided by the suppliers/manufacturers of the various components or by other available sources, such as standard material databases. Hence, although it might be acknowledged that some time may be saved by not having to request a declaration from each supplier/manufacturer of each component, the completeness, correctness and reliability of the obtained information still depends on how, when and if this information is provided by the suppliers/manufacturers. It is thus not necessarily true that the estimation of the total amount is more correct or more reliable when the claimed system is used.

3.5.2 Moreover, the board takes the view that any gains in efficiency or cost that may be obtained are the result of modifying the procedure of obtaining such declarations, i.e. the administrative procedure underlying the invention.

Instead of providing declarations about the amount of a substance in a component/material directly to the user, the suppliers/manufacturers of the various components provide the relevant information to record units, from where it can be retrieved (by the claimed system) any time the amount of a substance has to be calculated.

In the board's view therefore, if there are any gains

in efficiency, they are the result of modifying the administrative procedure of obtaining the total amount of a candidate substance in an article and not by solving a technical problem by technical means. According to established case law and practice, this amounts to a circumvention of a technical problem rather than to a solution of the technical problem through technical means, assuming that improving efficiency or reducing costs were regarded as technical problems.

3.6 Summarising, the board's opinion is that the claimed system is a general purpose computer system, which retrieves information, makes a calculation and indicates the result. The fact that the result represents the amount of a specific (selected) substance in an article does not change the fact that this amount is obtained merely by carrying out mathematic calculations based on pre-stored information related to theoretical substance/material compositions of the components of the article. The result is merely indicated (e.g. displayed) and no further action takes place on the basis of this result.

3.7 Hence, no technical problem is solved by the claimed system. No technical effect is apparent beyond those expected when an administrative procedure is implemented using a computer system.

In the absence of any implementation details, the board considers the claimed system as an obvious implementation of an administrative procedure using notoriously known technical means.

3.8 The board thus reaches the same conclusion as the examining division, namely that the subject-matter of

claim 1 of the main request does not involve an inventive step (Articles 52(1) and 56 EPC).

4. First auxiliary request - admission

- 4.1 The first auxiliary request was first filed with the appellant's statement setting out the grounds of appeal and it contains features that were not comprised in the claims discussed during the first-instance examination proceedings (see point V. above).

The appellant (then applicant), although it was informed of the examining division's objections of lack of inventive step, did not submit any amendments during the examination proceedings and pursued the same set of claims which was filed after the application entered the European phase and constitutes to the present main request.

Moreover, when it was summoned to oral proceedings by the examining division, the appellant (then applicant) withdrew in its letter dated 24 May 2019 its request for oral proceedings and requested a decision on the state of the file, foregoing thus another opportunity to file amended claims.

- 4.2 According to Article 12(4) RPBA 2007 (which applies here according to Article 25(2) RPBA 2020), the board has the power to hold inadmissible requests which could have been presented in the first instance proceedings.
- 4.3 In view of the above, the board takes the view that the appellant could and should have filed the first auxiliary request during the first-instance examination proceedings and decides not to admit it into the appeal

proceedings under Article 12(4) RPBA 2007.

4.4 The appellant, after having received the board's preliminary opinion stating that the board was minded not to admit the first auxiliary request into the proceedings did not provide any arguments to the contrary. It also stated that it would not attend the scheduled oral proceedings before the board. Therefore the board had no reason to revise its opinion in this respect.

5. Since there is no allowable and admissible request on file, the appeal must fail.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:



S. Sánchez Chiquero

T. Häusser

Decision electronically authenticated