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# Datasheet for the decision of 22 January 2024

Case Number: T 1531/21 - 3.5.07

16179852.5 Application Number:

Publication Number: 3136256

G06F17/22, G06F17/27 IPC:

Language of the proceedings: EN

#### Title of invention:

Method for comparing text files with differently arranged text sections in documents

# Applicant:

Schlafender Hase GmbH Software & Communications

#### Headword:

Comparing text files/SCHLAFENDER HASE

# Relevant legal provisions:

EPC Art. 84, 112(1) RPBA 2020 Art. 13(2)

# Keyword:

Amendment after summons - exceptional circumstances - main request (yes) - exceptional circumstances - first auxiliary request (no)

Claims - clarity - main request and second auxiliary request (no)

Referral to the Enlarged Board of Appeal - (no)

# Decisions cited:

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G 0003/98, G 0002/04, T 0002/80, T 0454/89, T 1129/97, T 0049/99, T 0190/99, T 0412/03, T 0547/08, T 1084/10, T 1009/12, T 0129/13, T 0623/13, T 0916/15, T 2136/16, T 2351/17, T 0428/18
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# Beschwerdekammern Boards of Appeal Chambres de recours

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Case Number: T 1531/21 - 3.5.07

DECISION
of Technical Board of Appeal 3.5.07
of 22 January 2024

Appellant: Schlafender Hase GmbH Software & Communications

(Applicant) Westerbachstraße 47

60489 Frankfurt am Main (DE)

Representative: 2K Patentanwälte Blasberg Kewitz & Reichel

Partnerschaft mbB Schumannstrasse 27

60325 Frankfurt am Main (DE)

Decision under appeal: Decision of the Examining Division of the

European Patent Office posted on  $17\ \mathrm{May}\ 2021$ 

refusing European patent application

No. 16179852.5 pursuant to Article 97(2) EPC

### Composition of the Board:

Chair J. Geschwind
Members: M. Jaedicke

P. San-Bento Furtado

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# Summary of Facts and Submissions

- I. The applicant (appellant) appealed against the decision under appeal. According to this decision, the subject-matter of independent claim 1 of the sole request lacked inventive step over "notoriously known computers and user interfaces". In an obiter dictum, the decision under appeal stated that the subject-matter of claim 1 lacked inventive step over the prior art disclosed in document D1 (US 7,392,251 B2).
- II. In its statement of grounds of appeal, the appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of the sole request considered in the decision. Moreover, it requested that the following question be referred to the Enlarged Board of Appeal:

"Is a feature in which a histogram is determined to calculate the word frequency in a digital document not technical if the feature enables a prior art method to compare two digital text documents with certain properties, multiple occurrences of the same root, with each other at all and if, in addition, the use of the feature significantly reduces the complexity and thus the computing time in comparison with an approach of the state of art?"

III. In a communication pursuant to Article 15(1) RPBA 2020 accompanying the summons to oral proceedings, the board expressed, among other things, its provisional opinion that the subject-matter of claim 1 of the sole request was unclear and lacked inventive step in view of either a notorious computer with a notorious user interface or

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document D1. The board also considered that the wording of claim 15 was unclear and that the subject-matter of claim 15 lacked novelty or inventive step. Moreover, there was no need to refer a point of law to the Enlarged Board of Appeal.

- IV. By letter of 21 December 2023, the appellant submitted a new main request and arguments.
- V. Oral proceedings were held as scheduled, and the appellant was heard on the relevant issues. In these oral proceedings, the appellant filed a new first auxiliary request and maintained the sole request considered in the contested decision which had been resubmitted with the statement of grounds of appeal as its second auxiliary request. It also maintained its request for a referral (see above, point II.). During the oral proceedings, the representative asked that specific statements appear in the minutes but did not want to submit those statements in writing. At the end of the oral proceedings, the Chair announced the board's decision.
- VI. The appellant's final requests were that the decision under appeal be set aside and that a patent be granted on the basis of the main request submitted with its letter of 21 December 2023 or the first auxiliary request filed in the oral proceedings before the board or the second auxiliary request corresponding to the set of claims resubmitted with the statement of grounds of appeal. As a procedural request, the appellant requested that a question formulated in point V of the statement of grounds of appeal (and as reproduced in point II. above) be referred to the Enlarged Board of Appeal.

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- VII. Claim 1 of the main request reads as follows:

  "A computer implemented method for systematically comparing the contents of at least two digitally stored text documents (Doc1, Doc2), that are composed from several non-identical but similar repetitions of a base subdocument, which are stored on digital medium and which are loaded by a computer to be compared by a computer, wherein the stored documents (Doc1, Doc2) have marked and unmarked text areas, wherein at the beginning all the text areas are unmarked, wherein the documents have the repetitions comprising the following steps:
  - a) Of each document, computing a histogram and comparing the computed histogram with a reference histogram;
    - each histogram including word frequencies; searching for an n, wherein n is a natural number, which when multiplied by the word frequencies of words in one of the computed histograms, causes the comparison of the histograms match within a predefined range;
  - b) searching for identical roots (Root1, Root2) in the unmarked text areas of the documents with n occurrences, of which there are at least two roots, wherein the roots comprise a string of text symbols, being in particular words, word groups or other unambiguous textual formatting functions, and must only occur exactly n times in each of the documents, and wherein if a root is not unambiguous it is discarded, and wherein a search for the root is carried out in the first document in order to determine unambiguity, and then a search for the root is carried out in the second document in order to determine its unambiguity;

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- c) if roots have been found, comparing of the documents, starting with the roots (Root1, Root2), until there is no longer any agreement, wherein the text areas (Area1, Area2) found in this way are being marked;
- d) repeating the above steps, starting with b) in a recursion until there are no longer any unique and identical roots or until no longer any found text areas can be marked, wherein the marked text areas are not taken into account in the search for roots and text areas;
- e) providing a user interface that enables a user to examine positions of the marked text areas (Area1, Area2) in each of the documents, allowing to visually display to the user both agreements and differences of the documents."
- VIII. Claim 1 of the first auxiliary request differs from claim 1 of the main request as follows:
  - (a) in step a) of claim 1 the text "and wherein the reference histogram is calculated based on a large reference document or based [on] Zipf's law;" has been inserted after "a reference histogram;"
  - (b) in step b) of claim 1 the text ", and wherein if a root is not unambiguous it is discarded" has been (i) removed after "and must only occur exactly n times in each of the documents" and (ii) inserted after "in the second document in order to determine its unambiguity"
- IX. Claim 1 of the second auxiliary request reads as follows:
  - "A computer implemented method for systematically comparing the contents of at least two digitally stored documents (Doc1, Doc2), which are stored on digital medium and which are loaded by a computer to be

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compared by a computer, wherein the stored documents (Doc1, Doc2) have marked and unmarked areas, wherein at the beginning all the areas are unmarked, wherein the documents have repetitions comprising the following steps:

- a) Computing a histogram of each document, and comparing the computed histogram with a reference histogram;
  - each histogram including word frequencies; searching for an n, wherein n is a natural number, which when multiplied by the word frequencies of words in one of the computed histograms, causes the comparison of the histograms match within in a predefined range;
- b) searching for identical and [sic!] roots (Root1, Root2) in the unmarked areas of the documents with n occurrences, of which there are at least two, wherein the roots comprise a string of text symbols, being in particular words, word groups or other unambiguous textual formatting functions, and must only occur exactly n times in each of the documents, and wherein if a root is not unambiguous it is discarded, and wherein a search for the root is carried out in the first document in order to determine unambiguity, and then a search for the root is carried out in the second document in order to determine its unambiguity;
- c) if roots have been found, comparison of the
   documents, starting with the roots (Root1,
   Root2), until there is no longer any agreement,
   wherein the areas (Areal, Area2) found in this
   way are being marked;
- d) repeating the above steps, starting with b) in a recursion until there are no longer any unique and identical roots or until no longer any found

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- areas can be marked, wherein the marked areas are at first not taken into account in the search for roots and areas;
- e) providing a user interface that enables a user to examine positions of the marked areas (Areal, Area2) in each of the documents, allowing to the user both agreements and differences of the documents."
- X. The appellant's arguments relevant to the present decision are discussed in detail below.

## Reasons for the Decision

1. The application relates to a method for systematically comparing the contents of at least two digitally stored documents.

# Main request

- 2. Admissibility of the main request under Article 13(2) RPBA 2020
- 2.1 Under Article 13(2) RPBA 2020, any amendment to a party's appeal case made after notification of a communication under Article 15(1) RPBA 2020, shall, in principle, not be taken into account unless there are exceptional circumstances, which have been justified with cogent reasons by the party concerned.
- 2.2 The set of claims according to the main request was submitted in response to objections under Article 84 EPC raised for the first time in the board's communication. As the appellant addressed these fresh objections at the first opportunity, the board considers that there are exceptional circumstances (see

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decision T 2351/17, Reasons 2 and the further decisions cited in Case Law of the Boards of Appeal of the EPO, 10th edition 2022, V.A.4.5.5 a)). Consequently, the main request is admitted into the appeal proceedings under Article 13(2) RPBA 2020.

- 3. Clarity
- 3.1 In point 6.1.1 of its communication, the board had objected that the expressions "reference histogram" and "unambiguous root" were unclear (Article 84 EPC).
- 3.2 In its letter dated 21 December 2023, the appellant argued that in accordance with the established case law (it referred to decisions T 190/99, T 1084/10, T 1009/12 and T 916/15), a claim should be interpreted as follows:

"The skilled person when considering a claim should rule out interpretations which are illogical or which do not make technical sense. He should try, with synthetical propensity i.e. building up rather than tearing down, to arrive at an interpretation of the claim which is technically sensible and takes into account the whole disclosure of the patent (Article 69 EPC). The patent must be construed by a mind willing to understand not a mind desirous of misunderstanding."

- 3.2.1 In the same letter, the appellant also submitted that a "root" was "unambiguous" if it occurred exactly n times in both documents, as specified in the claim.
- 3.3 Article 84 EPC stipulates that the claims shall define the matter for which protection is sought and be clear and concise. Regarding the case law cited by the appellant, the board agrees that in some decisions the boards interpret claims in light of the description and

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drawings to establish whether they are clear and concise. However, a number of decisions point out the limits to using the description and drawings for assessing compliance with the clarity requirement (see Case Law of the Boards of Appeal of the EPO, 10th edition 2022, II.A.6.3.5), as discussed in the following.

It has to be possible to understand the claims without reference to the description (see decisions T 2/80, Reasons 2; T 129/13, Reasons 3.5 and T 412/03, Reasons 2.4.1). In decision T 454/89, Reasons 4.1 (vii) and (viii), the responsible board shared this view and explained that Article 84 EPC requires that claims be clear in themselves when being read with knowledge of the prior art but without knowledge derived from the description in the patent application or the amended patent.

In decision T 1129/97, Reasons 2.1.2 and 2.1.3, the board held that the fact that the precise meaning of an unclear term was expressly disclosed in the description but not in the claims did not mean that the latter met the clarity requirement. The clarity stipulation under Article 84 EPC concerned only the claims and therefore required that they be clear in themselves, without there being any need for the skilled person to refer to the description. It was not possible to rely on the disclosure in the description under Article 69 EPC to avoid meeting the requirements of Article 84 EPC. In decision T 49/99, Reasons 12, the board held that since clarity was a claim requirement, a clarity deficiency in the claim wording was not rectified by the fact that in light of the description and drawings the reader might gain an understanding of the technical subjectmatter which the claim possibly defined (see also

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T 623/13, Reasons 1.1.2). The board endorses the cited case law and in the following applies it to the current case.

Regarding the decisions cited by the appellant, the board observes that according to Reasons 2.4 of decision T 1009/12, Article 69 EPC should not be used for the interpretation of claims in examination proceedings, where the claims have to make sense as they stand. Consequently, this decision supports the board's view and not the appellant's case. Similarly, decision T 916/15 explains in Reasons 1.3.1 that the concept of "a mind willing to understand" applies where it is necessary to interpret a claim of a granted patent for the purposes of Articles 69 and 123(3) EPC but not for assessing the allowability of amendments under Article 123(2) EPC during examination proceedings.

Regarding the objection to the expression "unambiguous root", the board is not convinced by the appellant's argument that a "root" is unambiguous if it occurs exactly n times in both documents. First and foremost, claim 1 does not specify the alleged connection between the unambiguity of a root and the claim feature that a root has to occur exactly n times in each document (see point VII. above, step b) of claim 1).

According to claim 1, the "roots comprise a string of text symbols [...] and must only occur exactly n times in each of the documents, [...]". In the board's understanding, this wording specifies that a "root" is a text string which occurs exactly n times in each of the documents systematically compared. Step b) of claim 1, which is directed to searching for "roots", further specifies: "wherein if a root is not

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unambiguous it is discarded, and wherein a search for the root is carried out in the first document in order to determine unambiguity, and then a search for the root is carried out in the second document in order to determine its unambiguity".

Given this wording of claim 1, an "unambiguous" "root" appears to have a further property than just being a "root" as defined in the first part of step b) of claim 1 ("searching for identical roots [...] in each of the documents").

The usual meaning of the adjective "unambiguous" in English is that something is expressed in a clear manner (see the merriam-webster.com/thesaurus, which provides the definitions "so clearly expressed as to leave no doubt about the meaning" and "not subject to misinterpretation or more than one interpretation", or the definition in collinsdictionary.com: "If you describe a message or comment as unambiguous, you mean that it is clear and cannot be understood wrongly."). In other words, the adjective "unambiguous" concerns the semantics of the "string of text symbols" that constitutes the root, whereas the feature "which occurs exactly n times in each of the documents" concerns the frequency of occurrence of the "string of text symbols", which has nothing to do with semantics. Consequently, "unambiguous" seems to instead specify an additional semantic property of a "root".

If the word "unambiguous" merely expressed that a root had to occur exactly n times in each document, the claim wording "and wherein if a root is not unambiguous it is discarded, and wherein a search for the root is carried out in the first document in order to determine unambiguity, and then a search for the root is carried

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out in the second document in order to determine its unambiguity" would be redundant and merely add inconsistent terminology (i.e. claim 1 would also violate the requirements of Article 84 EPC).

The appellant's argument was not helped by its submission in the oral proceedings on the first auxiliary request that the word "unambiguity" had nothing to do with the "occurs exactly n times" requirement for a "root". While the appellant has amended step b) of claim 1 in the first auxiliary request by shifting the position of the phrase "and wherein if a root is not unambiguous it is discarded," to the end of step b) - see point VIII.(b) above - the board is not convinced that this amendment has changed the meaning of the word "unambiguous" in step b) of claim 1 of the first auxiliary request when compared with step b) of claim 1 of the main request. Consequently, the board considers that the appellant's submissions in writing and at the oral proceedings on the meaning of the word "unambiguous" in step b) of claim 1 are inconsistent, meaning that the appellant was not able to convincingly explain the meaning of "unambiguous" "root" in claim 1.

The further arguments by the appellant were not convincing either. When asked by the board in the oral proceedings whether the value of the natural number "n" in the phrase "must only occur exactly n times in each of the documents" was greater than one, the appellant repeatedly stated and explicitly confirmed upon request that the number n as defined in claim 1 could also be one. However, according to the description, the searched number n is the number of "repetitions" of a text fragment ("base subdocument") in each document to be compared (see the description, page 12, lines 4 to

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20 and page 17, line 9 to page 18, line 33), such repetitions being specified in claim 1. If the claim is to be supported by the description, as required by Article 84 EPC, the number n cannot be one if the document contains repetitions as specified in claim 1. The appellant's inconsistent submissions on the meaning of claim 1 cannot persuade the board that the meaning of "unambiguous" "root" is clear.

In view of the above, the board has no doubt that the wording of claim 1 of the main request is unclear (Article 84 EPC) because the skilled person cannot understand, in claim 1, what is meant by a "root" that is "unambiguous".

- 3.5 Regarding the board's objection to "reference histogram", the appellant argued in the paragraph bridging pages 3 and 4 of its letter of reply that the expression "reference histogram" in claim 1 was like a "reference value" that served as basis for a comparison. Moreover, dependent claim 3 explained how the reference histogram was obtained. At the oral proceedings, the appellant repeated these arguments and submitted that it was willing to amend claim 1 by adding the features of dependent claim 3 should the board consider this necessary.
- 3.6 The board considers that the expression "reference histogram" is not clear (Article 84 EPC). While claim 1 specifies that computed histograms of word frequencies are compared to the reference histogram, this does not define the word frequencies included in the reference histogram. In other words, the properties of the reference histogram are not defined beyond those of any histogram including word frequencies. Consequently, the skilled person reading claim 1 does not know when a

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histogram including word frequencies falls under the expression "reference histogram", and thus it is unclear what the purpose of the reference histogram is in the claimed method. It follows that claim 1 of the main request is not clear (Article 84 EPC).

# First auxiliary request

- 4. Admissibility under Article 13(2) RPBA 2020
- The first auxiliary request was filed at the oral proceedings before the board, i.e. after notification of the communication under Article 15(1) RPBA 2020. Consequently, the first auxiliary request can be admitted into the appeal proceedings only if this is justifiable in view of exceptional circumstances under Article 13(2) RPBA 2020 (see point 2.1 above).
- 4.2 When compared to claim 1 of the main request, claim 1 of the first auxiliary request comprises the amendments as defined in point VIII.(a) and (b) above.
- At the oral proceedings, the appellant argued that the first auxiliary request was admissible under Article 13(2) RPBA 2020 in view of exceptional circumstances since the board raised a fresh clarity objection during the oral proceedings. The board had argued that claim 1 did not specify that the feature "wherein the roots [...] must only occur exactly n times in each of the documents" defined what was meant by a root being "unambiguous". This objection was not, as argued by the board, merely a more detailed argument for the clarity objection raised against the expression "unambiguous root" in point 6.1.1 of the board's communication under Article 15(1) RPBA 2020 but constituted a fresh clarity objection giving the

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appellant the right to file amendments which were admissible under Article 13(2) RPBA 2020.

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4.4 However, the board had already referred the appellant in the oral proceedings to page 3, fourth paragraph of its letter of 21 December 2023, where the appellant had argued that a root was unambiguous if it occurred exactly n times in each document as specified in the claim. Consequently, the board's comment that claim 1 did not specify that an unambiguous root was defined as a root that occurred exactly n times in each document was merely a comment on the appellant's reply to be board's objection. The cited passage of the appellant's letter also confirms that the appellant was able to understand the board's clarity objection against "unambiguous root" and was in a position to reply to this objection when it filed its letter of reply dated 21 December 2023.

In view of the above, the appellant had the opportunity to submit amendments of its case in response to the board's objection against the expression "unambiguous root", i.e. before the oral proceedings were held. Consequently, the amendment in step b) of claim 1 of the first auxiliary request cannot be justified by exceptional circumstances within the meaning of Article 13(2) RPBA 2020.

4.5 The board further notes that the appellant amended step a) of the method of claim 1 to define the expression "reference histogram" to which the board had objected to in point 6.1.1 of its communication under Article 15(1) RPBA 2020. In the paragraph bridging pages 3 and 4 of its letter of 21 December 2023, the appellant argued that the expression "reference histogram" was defined in claim 1 as a reference value

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that served as basis for a comparison. Moreover, dependent claim 3 explained how the reference histogram was obtained. Given this response of the appellant, it is abundantly clear that the appellant understood the board's clarity issue and had the possibility to submit an amended claim set with its response. Consequently, the amendment in step a) of the first auxiliary request cannot be justified by exceptional circumstances within the meaning of Article 13(2) RPBA 2020 (see T 428/18, Reasons 3.4 and 3.5).

4.6 Since there are no exceptional circumstances justifying the late filing of the first auxiliary request, this request is not admissible under Article 13(2) RPBA 2020.

# Second auxiliary request

## 5. Admissibility

Since the current second auxiliary request is identical to the sole claim request considered in the decision under appeal, the second auxiliary request is admissible (Article 12(2) RPBA 2020).

# 6. Clarity

The board's clarity objections to the main request also apply to the second auxiliary request since the relevant parts of the wording of claim 1 do not differ substantially with respect to these clarity objections. The expression "reference histogram" is not further defined in claim 1 of the second auxiliary request. Nor

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is it clear what an "unambiguous" "root" is.

Consequently, claim 1 of the second auxiliary request is unclear (Article 84 EPC).

# Request for a referral to the Enlarged Board of Appeal

- 7. Article 112(1) EPC stipulates that, in order to ensure uniform application of the law, or if a point of law of fundamental importance arises a board of appeal shall, during proceedings on a case and either of its own motion or following a request from a party to the appeal, refer any question to the Enlarged Board of Appeal if it considers that a decision is required for the above purposes. If the board of appeal rejects the request, it shall give the reasons in its final decision.
- 7.1 In the appeal proceedings, the appellant did not provide any arguments why it considered that a referral to the Enlarged Board of Appeal was necessary to arrive at a decision on the current appeal case.
- 7.2 Under the established case law (see Case Law of the Boards of Appeal of the EPO, 10th edition 2022, V.B. 2.3.3), the referred question must not have merely theoretical significance for the original proceedings, which would be the case if the referring board were to reach the same decision regardless of the answer to the referred question (G 3/98, OJ 2001, 62, Reasons 1.2.3 and T 547/08, Reasons 4). Rather, the referred question must be relevant for deciding the case in question (G 2/04, OJ 2005, 549, Reasons 1.4 and T 2136/16, Reasons 8.3).
- 7.3 Since the appellant's main request and second auxiliary request are not allowable under Article 84 EPC and its

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first auxiliary request is not admissible, it is not necessary to decide on inventive step for any of the appellant's claim requests to arrive at a decision on the current case. Consequently, the appellant's request for a referral to the Enlarged Board of Appeal of a question on inventive step (see point II. above) is not relevant for deciding the current case and cannot be allowed.

# Conclusion

8. Since none of the requests admitted into the appeal proceedings is allowable, the appeal is to be dismissed.

# Order

# For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chair:



S. Lichtenvort

J. Geschwind

Decision electronically authenticated