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## Datasheet for the decision of 25 November 2019

Case Number: T 2948/18 - 3.5.07

Application Number: 01957609.9

Publication Number: 1208453

IPC: G06F17/00

Language of the proceedings: EN

#### Title of invention:

Plant maintenance technology architecture

#### Applicant:

Siemens Aktiengesellschaft

#### Headword:

Plant maintenance/SIEMENS

# Relevant legal provisions:

EPC Art. 56

EPC R. 103(1)(a)

PCT Art. 17(2)(a), R. 16.1

# Keyword:

Remittal to the department of first instance - (no)
Reimbursement of international search fee - (board not competent)
Inventive step - (no)
Reimbursement of appeal fee - (no)

#### Decisions cited:

T 1242/04, T 0506/08, T 0779/11



# Beschwerdekammern Boards of Appeal Chambres de recours

Boards of Appeal of the European Patent Office Richard-Reitzner-Allee 8 85540 Haar GERMANY Tel. +49 (0)89 2399-0 Fax +49 (0)89 2399-4465

Case Number: T 2948/18 - 3.5.07

DECISION
of Technical Board of Appeal 3.5.07
of 25 November 2019

Appellant: Siemens Aktiengesellschaft
(Applicant) Werner-von-Siemens-Straße 1

80333 München (DE)

Decision under appeal: Decision of the Examining Division of the

European Patent Office posted on 19 June 2018

refusing European patent application No. 01957609.9 pursuant to Article 97(2) EPC

#### Composition of the Board:

Chairman R. Moufang Members: R. de Man

M. Jaedicke

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## Summary of Facts and Submissions

- I. The applicant (appellant) appealed against the decision of the Examining Division refusing European patent application No. 01957609.9, which was filed as international application PCT/IB01/00694 and published as WO 01/69417.
- II. Acting in its capacity of International Searching Authority, the European Patent Office issued a declaration under Article 17(2)(a) PCT to the effect that no international search report would be established because the subject-matter of the application related to schemes, rules or methods of doing business. The declaration stated, more specifically, that claims 48 to 59 related to a method of doing business and that claims 1 to 47 related to commonplace technological features for performing business methods. Searching such features would serve no useful purpose.
- III. The Examining Division refused the application without carrying out a search. It decided that the subject-matter claimed in the sole substantive request lacked inventive step over a notoriously known networked computer system.
- IV. In its statement of grounds of appeal, the appellant maintained the sole substantive request considered in the decision under appeal and filed a copy of its claims. It requested that the decision under appeal be set aside, that a patent be granted on the basis of the sole substantive request, and that the appeal fee be reimbursed in view of an alleged substantial procedural violation.

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- V. In a communication accompanying the summons to oral proceedings, the Board expressed the preliminary view that the Examining Division had not committed a substantial procedural violation and that the subjectmatter of claim 1 lacked inventive step over the skilled person's common general knowledge.
- VI. In a letter dated 25 October 2019, the appellant commented on the Board's communication.
- VII. Oral proceedings took place on 25 November 2019 and were attended by the appellant. At the end of the oral proceedings, the chairman pronounced the Board's decision.
- VIII. The appellant requested that the decision under appeal be set aside, that the case be remitted to the department of first instance for further prosecution, that the appeal fee be reimbursed and that the search fee be reimbursed.
- IX. Claim 1 of the sole substantive request reads as follows:
  - "A method of applying and/or improving maintenance services to plants comprising,
  - providing a process description manual (10) in electronic form comprising a collection of operative business and maintenance processes,
  - providing a knowledge database (12) and providing hardware and software tools (14) for providing maintenance services to plants, wherein the process description manual (10), the knowledge database (12) and the hardware and software tools (14) are all interlinked to one another,

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- whereby the software tools (14) are installed in the plant (16) or are accessible over a network connection and are chosen utilizing shared information found in the process description manual (10) and the knowledge database (12)."
- X. The appellant's arguments, where relevant to the decision, are discussed in detail below.

#### Reasons for the Decision

- 1. The appeal complies with the provisions referred to in Rule 101 EPC and is therefore admissible.
- 2. Request for remittal
- 2.1 The appellant requested remittal of the case to the Examining Division because the application had been refused for lack of inventive step without a search having been performed. The lack of any prior-art documents had made it difficult for the appellant to know how to amend the claims, which meant that it had not had a fair procedure and that its right to be heard had been violated.
- 2.2 In decision T 1242/04 (OJ EPO 2007, 421), the deciding board stressed the fundamental importance of the search as an element of the grant procedure (see reasons 8.2) and concluded that where an application's subjectmatter had non-technical aspects, a declaration under Rule 45 EPC 1973 could be issued only in exceptional cases in which the claimed subject-matter, i.e. the entire set of claims including all independent and dependent claims, clearly had no technical character (see reasons 8.4). Although that provision is not

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identical to Article 17(2)(a) PCT (in combination with Rule 39.1 PCT), there appears to be no good reason why the same should not apply to the issuing of a declaration under Article 17(2)(a) PCT (see decision T 779/11 of 23 June 2016, reasons 3.5).

In the present case, the subject-matter of originally filed independent claim 1, including a step of "utilizing connected software tools and hardware tools", does have technical character.

- The board in decision T 1242/04 took the view, however, that in such circumstances it was not always necessary for the examining division to carry out an additional search in the documented prior art. In particular, it was legitimate to refuse an application for lack of inventive step where the objection was based on knowledge that was "notorious" or indisputably formed part of the common general knowledge (see reasons 9.2). This approach has been followed in a number of other decisions (see T 779/11, reasons 3.5, and the decisions cited there).
- 2.4 Although the Board acknowledges that it is unfortunate if no prior-art search is undertaken where a search should be carried out, it sees insufficient reason to deviate from this established case law. It is not persuaded by the argument that, in general, a search is necessary to allow an applicant to identify suitable amendments to overcome an objection of lack of inventive step. The requirement to give reasons for its objections obliges an examining division raising an objection of lack of inventive step based on undocumented notorious prior art to properly identify that prior art in the detail necessary to allow a comparison to be made between the prior art and the

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subject-matter claimed. The applicant is thus not confronted with "secret" prior art that it can only speculate about when drafting amended claims. Nor is there an inherent violation of its right to be heard.

- 2.5 In view of the above, the Board does not consider it appropriate to remit the case to the Examining Division to perform an additional search without first examining the merits of the case.
- 3. Request for reimbursement of the search fee
- 3.1 At the oral proceedings, the appellant also requested reimbursement of the search fee.

The only search fee that was paid for the present application is the international search fee, paid under Rule 16.1(a) and (b) PCT to the International Bureau of WIPO as receiving Office and for the benefit of the EPO acting, under Article 154 EPC 1973 (corresponding to Article 152 EPC), as an International Searching Authority within the meaning of the PCT.

- 3.2 The present appeal lies from a decision of the Examining Division. The Examining Division is the department of the EPO, in these proceedings a designated Office under Article 153(1)(a) EPC, which is responsible for the examination of the Euro-PCT application corresponding to the international application (Article 153(2) EPC). In such proceedings, the provisions of the PCT and its Regulations are to be applied, supplemented by the provisions of the EPC (Article 150(2) EPC).
- 3.3 Since neither the PCT nor the EPC contains any provision allowing the EPO, as designated Office, to

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reimburse the international search fee, the Board is not competent to decide on the appellant's request, which therefore cannot be allowed (see also decision T 506/08 of 16 August 2012, reasons 13).

- 4. The invention as defined by claim 1
- 4.1 Claim 1 relates to a method of "applying and/or improving" maintenance services to plants.

The method defines steps of providing an electronic "process description manual", a "knowledge database" and "hardware and software tools for providing maintenance services to plants".

The process description manual, the knowledge database and the hardware and software tools are "all interlinked to one another".

The process description manual comprises a "collection of operative business and maintenance processes".

The software tools are "installed in the plant" or are "accessible over a network connection". They are "chosen utilizing shared information found in the process description manual and the knowledge database".

4.2 The content of the process description manual according to one embodiment is described on page 10, line 14, to page 14, line 15, of the published application with reference to Figures 6 to 11. It is clear from this description that the manual may contain purely cognitive information to be read and processed by humans, such as "a section on the theory of management technology and then a portion on marketing" (page 10,

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lines 16 to 18) or "a bid preparation section for the plant" (page 11, lines 1 and 2).

- 4.3 The content of the knowledge database is described on page 14, lines 16 to 27, with reference to Figure 12. The knowledge stored in the database encompasses purely cognitive information for human consumption, such as "diagnostic data for analysis of know-how, diagnostic models, forecasting and cost/benefit models", together providing "maintenance decision support" (page 14, lines 16 to 19).
- 4.4 The claim's "software tools" are illustrated in Figure 13 and described on page 14, line 28, to page 15, line 3. They include "maintenance management systems", "maintenance decision support", "conditioned monitoring systems", "digital control systems", "strategy optimization systems", "enterprise resource planning", "manufacturing resource planning" and "engineering data management".

The application describes none of these software tools in any detail, but the appellant did not dispute that they had been well known in the art at the priority date of the application. In addition, most of these tools provide non-technical functionality ("management", "decision support", "strategy optimization", "planning") and the remaining tools provide, at best, unspecified technical functionality ("conditioned monitoring", "digital control").

Another example of a software tool is a well-known word processor program (page 2, lines 28 to 30).

4.5 The application does not give any examples of "hardware tools". Again, the appellant did not dispute that such

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tools had been well known in the art at the priority date of the application.

- 4.6 The "interlinked" feature refers to the "links" 70, 72 and 74 mentioned on page 8, lines 3 to 6, and shown in Figure 4 (corresponding to the arrows in Figure 1, mentioned on page 5, lines 8 to 13). The application does not explain what those links are or what they do. The appellant did not contest that hyperlinks are an example of such links.
- 4.7 The feature specifying that the software and hardware tools are "chosen utilizing shared information found in the process description manual and the knowledge database" is supported only by the passage on page 5, lines 24 to 29, which explains that the tools are "chosen utilizing shared information from the global and regional information found in the manual 10 and the database 12, so that a best of class tool set is made available at the local level via a stand alone application, a server-based network connected application or via a web-based ASP (application service provider)".

Thus, this feature states that the available tools have been chosen on the basis of information contained in the process description manual and the knowledge database. The description suggests that, as a result, they form a "best of class tool set".

#### 5. Inventive step

In view of the discussion in points 4.4 and 4.5 above, "hardware and software tools for providing maintenance services to plants" were well known in the art at the priority date of the application. Since such tools were

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used to provide (or "apply", in the wording of claim 1) maintenance services to a plant, it was at least an obvious possibility that they were present ("installed") in the plant.

- The feature specifying that these tools were "chosen utilizing shared information found in the process description manual and the knowledge database" defining an entity in terms of the process by which it was obtained limits the tools, if at all, only in the sense that, as suggested in the description, they form a "best of class tool set". Such a limitation merely reflects an obvious desire.
- 5.3 For the sake of completeness, the Board notes that if the feature were interpreted as a step of choosing the software tools it could still not support an inventive step, as it would rely on the purely intellectual effort of selecting software tools on the basis of cognitive information contained in the process description manual and the knowledge base.

In this respect, the appellant argued, in its letter of 25 October 2019, that the invention relieved a human from interpreting the information in the process description manual but, at the oral proceedings, conceded that the application did not support its position. Instead, it now argued that it was not important that the information had to be processed by a human. The Board cannot agree, however, that an inventive step can be based on an alleged technical effect whose actual achievement relies on a human's intellectual effort when the invention is put into practice.

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5.4 The claimed "process description manual" and "knowledge database" are electronically accessible sources of purely cognitive and thus non-technical information. In the most technical interpretation of the claim, these information sources are linked to each other and to the hardware and software tools via hyperlinks.

Since the World Wide Web, which provides electronic access to information sources interlinked by means of hyperlinks, was well known at the priority date of the application (as is apparent from the fact that it is referred to without further explanation in the application on page 5, lines 14 to 16), the provision of the claimed information sources would have been obvious to the skilled person.

- 5.5 Since the only interaction between the steps of providing the two information sources and the step of providing the hardware and software tools consists in the presence of known (hyper)links interconnecting the information sources and the tools in an unspecified manner, the combination of these features, which forms the subject-matter of claim 1, lacks inventive step (Article 56 EPC).
- In its statement of grounds of appeal, the appellant essentially argued that the invention allowed a user to improve plant maintenance. However, whether this is so depends on the knowledge and abilities of the user, on the cognitive content of the process description manual and the knowledge database, and on the undisclosed functionality of the hardware and software tools. The appellant's argument does not therefore put into question the above finding of lack of inventive step.

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The appellant's remaining arguments (based on on-line monitoring, software updates being checked for automatically, and continuous/uninterrupted improvement of the maintenance services) have no basis in the claim and lack any detailed support in the application.

Consequently, they need not be discussed further.

#### 6. Conclusion

Since the sole substantive request is not allowable, the appeal is to be dismissed.

7. Request for reimbursement of the appeal fee

As the appeal is not allowable, the request for reimbursement of the appeal fee under Rule 103(1)(a) EPC is to be refused.

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# Order

### For these reasons it is decided that:

- 1. The appeal is dismissed.
- 2. The request for reimbursement of the appeal fee is refused.
- 3. The request for reimbursement of the search fee cannot be allowed.

The Registrar:

The Chairman:



I. Aperribay

R. Moufang

Decision electronically authenticated