Datasheet for the decision
of 4 July 2017

Case Number: T 1817/14 - 3.5.06
Application Number: 11751562.7
Publication Number: 2441033
IPC: G06N5/04, G06F17/30
Language of the proceedings: EN

Title of invention:
THE FSTP EXPERT SYSTEM

Applicant:
Sigram Schindler Beteiligungsgesellschaft mbH

Headword:
Expert system/SCHINDLER

Relevant legal provisions:
EPC Art. 56, 69, 84
EPC R. 111(2), 137(3)
RPBA Art. 11

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Keyword:
Fundamental procedural deficiency - yes (non-admitted request not mentioned in the decision)
Special reasons for not remitting the case - yes (missing reasons contained in the minutes)
Relationship between Articles 69 and 84 EPC
Referral of questions to the Enlarged Board - no
Inventive step - no (all requests)

Decisions cited:
T 0860/93, T 0049/99, T 0641/00, T 0556/02, T 0061/03, T 0820/14

Catchword:
DECISION
of Technical Board of Appeal 3.5.06
of 4 July 2017

Appellant: Sigram Schindler Beteiligungsgesellschaft mbH
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Decision under appeal: Decision of the Examining Division of the European Patent Office posted on 17 April 2014 refusing European patent application No. 11751562.7 pursuant to Article 97(2) EPC.

Composition of the Board:
Chairman W. Sekretaruk
Members: M. Müller
         S. Krischer
Summary of Facts and Submissions

I. The appeal lies against the decision of the examining division, with reasons dispatched on 17 April 2014, to refuse European patent application No. 11 751 562.7 for lack of clarity of the main and first auxiliary requests, Article 84 EPC. In a section entitled "Obiter dicta" it is added that claim 1 of the main request lacks inventive step, Article 56 EPC, over a conventional database. A second auxiliary request filed during the oral proceedings before the examining division and annexed to the minutes of the oral proceedings was not admitted pursuant to Rule 137(3) EPC.

II. Notice of appeal was filed on 4 June 2014, the appeal fee being paid on the same day. A statement of grounds of appeal was received on 27 August 2014. The appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of the main or the auxiliary request "of the appealed decision", and as re-filed with the grounds of appeal, or on the basis of the second auxiliary request as attached to the grounds of appeal, or that the case be remitted to the examining division for further prosecution. The application documents are as follows:

claims
1-10 as filed on 7 August 2013 and re-filed on 27 August 2014 (main request)
1-8 as filed on 3 March 2004 and re-filed on 27 August 2014 (first auxiliary request)
1-6 as filed on 27 August 2014 (2nd auxiliary request)
description pages 1-69 as originally filed
drawings sheets 1-17 as originally filed
The appellant argued that it had been a substantial procedural violation for the examining division not to mention the second auxiliary request in the decision. However, it did not request immediate remittal of the case to the examining division, but only if the board was not minded to grant any of the pending requests (see grounds of appeal, section II). The appellant also challenged the clarity objections of the examining division because they had been raised without due consideration of Article 69 EPC.

III. In an annex to a summons to oral proceedings, the board informed the appellant of its preliminary opinion that the claims were unclear, Article 84 EPC, and their subject-matter lacked inventive step over common knowledge in the art, Article 56 EPC.

IV. In response to the summons, with letter dated 6 June 2017, the appellant provided further arguments on the relation between, on the one hand, Article 84 EPC and, on the other hand, either Article 69 EPC or a "general principle of law" relating to claim interpretation. It also suggested that the board was departing from established jurisprudence of the boards of appeal and invited it to refer questions to the Enlarged Board of Appeal, without however proposing specific questions for referral.

V. Oral proceedings took place as scheduled on 4 July 2017, at the end of which the chairman announced the board's decision.

VI. Claim 1 of the main request reads as follows:

"A method for analyzing of a patent's or any other endeavor's claim (and the technical teaching TT.p
underlying it) over at least one document.i (and the technical teaching TT.i underlying it), PTR denoting the set of information that includes a) the technical teaching (TT.p) to be analyzed and b) the technical teachings (TT.i) of the at least one document.i, whereby a technical teaching (TT) identifies
- A, B, C, D, ... as the elements of the technical teaching (TT.p) to be analyzed,
- A.i, B.i, C.i, D.i, ... as the peer elements in the TT.i's (of document.i, i=1,2,3,...) to these TT.p elements, and
- X).n, X.i).n as the fundamental facts of these elements X/X.i=A/A.i, B/B.i, C/C.i,..., n=1,2,3,...,
whereby the user of this method interacts with this method's application by a computer system, whereby this application
- repeatedly reads information from, writes it into, copies it to, or transforms it from/to/within this computer system's various memory sections via their various interfaces during executing the steps (a)-(e), whereby this information comprises items of a
- first kind, given by the user, comprising information identifying or describing at least one item of the PTR or one law of nature or one National Patent System, which are input to the computer system by the user, and a
- second kind, the below (a)-(d), which are generated by the execution of this method's steps (a)-(c), and
whereby applying this method comprises at least once executing any one of the steps (a)-(d) of compiling
(a) as (a)-item at least one first kind item into at least one technical fundamental fact of the TT.p or a TT.i,
(b) as (b)-item at least one TT.i technical fundamental fact disclosing its peer TT.p fundamental fact,
(c) as (c)-item at least one combination of technical fundamental facts of TT.i's that may disclose or suggest TT.p, and
(d) inputting all such second kind items into this information and defining all interrelations - as directed by the user - between all items in the information, wherein such defining of interrelations includes that the (a)-(c)-items are processed to form an ANC (ANC = anticipates/not-anticipates-and-not-contradicts/contradicts) Matrix, wherein the ANC defines the relation between X.i).n's and X).n's, such that a query for any item in regard to the information of the technical teaching is replied to / answered by this method automatically and instantly by displaying to the user this item's information and all its such interrelations to other items (i.e. presentation of these data)."

Claim 1 of the first auxiliary request reads as follows:

"A method for analyzing the technical teaching TT.p claimed in a patent's or patent application's claim over at least one document. (and the technical teaching TT.i it discloses), PTR denoting the set of information that includes a) the technical teaching (TT.p) to be analyzed and b) the technical teachings (TT.i) of the at least one document.i, whereby a formal description of a PTR identifies – A, B, C, D, ... as the elements of the technical teaching (TT.p) of the claim to be analyzed,
- A.i, B.i, C.i, D.i,... as the corresponding elements in the TT.i's (of document.i, i=1,2,3,...) to these TT.p elements, and
- X).n, X.i).n as properties/attributes of these elements X/X.i=A/A.i, B/B.i, C/C.i,..., n=1,2,3,...,
whereby the user of this method interacts with a computer system in that the user
- repeatedly reads information from, writes it into, copies it to, or transforms it from/to/within this computer system's various memory sections via their various interfaces during executing the steps (a)-(d),
whereby this information comprises items of a
- first informal kind, given by the user, comprising natural language information identifying or describing at least one item of the PTR which are input to the computer system by the user, and a second formal kind, the below (a)-(c),
whereby applying this method comprises at least once executing any one of the steps (a)-(d)
(a) of compiling as (a)-item at least one first kind item into at least one formal description of the first kind item in the form of a property/attribute of an element of the TT.p or a TT.i,
(b) of compiling as (b)-item at least one property/attribute of an element of a TT.i that corresponds to the property/attribute of an element of the TT.p,
(c) of compiling as (c)-item at least one combination of properties/attributes of elements of TT.i's that may disclose properties/attributres of TT.p elements, and
(d) of inputting all such second kind items into this information and defining all relations - as directed by the user - between all items in the
information, wherein such defining of relations includes that the (a)-(c)-items are processed to form an ANC (ANC = anticipates/not-anticipates-and-not-contradicts/contradicts) Matrix, wherein the ANC Matrix defines the relation between X.i).n's and X).n's in that it identifies in a Matrix for each property/attribute X).n of all elements X of TT.p if the TT.i's disclose elements X.i that contain properties/attributes X.i).n that anticipate, not anticipate or contradict said properties/attributes X).n, such that a query for any item in regard to the information of the technical teaching is replied to / answered by this method automatically and instantly by displaying to the user this item's information and all its such interrelations to other items."

Claim 1 of the second auxiliary request reads as follows:

"A method for analyzing the technical teaching TT.p claimed in a patent's or patent application's claim over at least one document.i (and the technical teaching TT.i it discloses), PTR denoting the set of information that includes a) the technical teaching (TT.p) to be analyzed and b) the technical teachings (TT.i) of the at least one document.i, whereby a formal description of a PTR identifies

- A, B, C, D, ... as the elements of the technical teaching (TT.p) of the claim to be analyzed,
- A.i, B.i, C.i, D.i,... as the corresponding elements in the TT.i's (of document.i, i=1,2,3,...) to these TT.p elements, and
- X).n, X.i).n as properties/attributes of these elements X/X.i=AIA.i, B/B.i, C/C.i,..., n=1,2,3,...,
whereby the user of this method interacts with a computer system in that the user repeatedly reads information from, writes it into, copies it to, or transforms it from/to/within this computer system's various memory sections via their various interfaces during executing the steps (a)-(d),

whereby this information comprises items of a
- first informal kind, given by the user, comprising natural language information identifying or describing at least one item of the PTR which are input to the computer system by the user, and a
- second formal kind, the below (a)-(c),

whereby applying this method comprises at least once executing every one of the steps (a)-(d) of
(a) as (a)-item, compiling by the user at least one first kind item into at least one formal description of the first kind item in the form of a property/attribute of an element of the TT.p or a TT.i,

(b) as (b)-item, compiling by the user at least one property/attribute of an element of a TT.i that corresponds to the property/attribute of an element of the TT.p ,

(c) as (c)-item, compiling by the user at least one combination of properties/attributes of elements of TT.i's that may disclose properties/attributes of TT.p elements, and

(d) of inputting by the user all such second kind items into this information and defining all relations - as directed by the user - between all items in the information, wherein such defining of relations includes that the (a)-(c)-items are processed to form an ANC (ANC = anticipates/not-anticipates-and-not-contradicts/contradicts) Matrix, wherein the ANC Matrix defines, in any entry item, the relation
between X.i).n's and X).n's provided by the user by identifying whether a X.i).n anticipates, not anticipates or contradicts the corresponding X).n, such that a query for any (a)-item, (b)-item, (c)-item or matrix entry item is replied to / answered by this method automatically and instantly by displaying to the user this item's information and all its such relations to other items."

All three requests also comprise an independent apparatus claim corresponding closely to method claim 1.

**Reasons for the Decision**

*The alleged procedural violation, Article 11 RPBA*

1. During the oral proceedings before the examining division, a set of claims according to a second auxiliary request was filed but not admitted (see the minutes, points 74, 80 and 90). However, the decision under appeal does not mention the existence of a second auxiliary request, let alone give reasons why it was not admitted.

1.1 The decision of the examining division to refuse consent to (i.e. not to admit) a set of amended claims under Rule 137(3) EPC is a decision which, according to Rule 111(2) EPC, must be reasoned. Therefore, the fact that the second auxiliary request is not mentioned in the decision under appeal makes the decision insufficiently reasoned and thus
constitutes a fundamental deficiency in the sense of Article 11 RPBA.

1.2 However, as is clear from the minutes (and not disputed by the appellant), the appellant was heard on the admission of the second auxiliary request, and the claims themselves are annexed to the minutes. Also, the reasons missing from the decision are available in the minutes.

1.3 Therefore, the appellant was in a position to understand the examining division's reasons for not admitting the second auxiliary request, and to respond to them in its grounds of appeal.

1.4 The board considered these circumstances, along with the appellant's express agreement to the board considering the substantive merit of the requests to hand (see grounds of appeal, section II, last sentence), to constitute special reasons for not immediately remitting the case to the examining division under Article 11 RPBA.

Admission of auxiliary requests

2. The examining division had discretion under Rule 137(3) EPC to refuse consent to the second auxiliary request, and the board has no reason to doubt that it exercised its discretion correctly. This and Article 12(4) RPBA notwithstanding, however, the board exercises its own discretion and admits the second auxiliary request into the appeal proceedings (see T 820/14, reasons 10). It is also relevant in this respect that the board finds all requests to lack inventive step for the same reasons (see below).
The invention

3. The application relates to an expert system for aiding patent administration and jurisprudence by providing (semi-)automated support for assessing a patent or patent application (or other "endeavour") for novelty and inventive step in view of "a national patent system or its Highest court precedents" (see page 1, lines 1-5; see also page 3, penultimate paragraph; sections I.K and I.L on pages 26-28; page 29, paragraph 2; section II.A.1.2, page 37, towards the bottom et seq.; and page 47, footnote "To F:").

3.1 In a nutshell, the invention proposes to obtain from a patent (or patent application) p and any prior art document i elements of their respective technical teachings TT.p and TT.i. These may be specified informally, e.g. in natural language (see the "technical fundamental informal facts", page 2, in the middle), or formally ("technical fundamental formal facts"). The TT.i's of the prior-art document i are collectively referred to as "RS" (reference set) and, in combination with the TT.p's, as "PTR" (pair of TT.p and RS; see page 2, in the middle).

3.2 The elements and their "relations", expressing anticipation and contradiction between elements or sets of elements, are arranged in what is called an ANC matrix ("anticipates/non-ants/contradicts"; see e.g. page 3, line 9, and figure 2b).

3.3 The information in this matrix can be queried by and is then displayed to the user (see e.g. original claim 1, last two lines).
The prior art

4. The remarks on inventive step given in the decision refer to a prior-art document but do not rely on many individual features of its disclosure. As is explained below, the board takes the view that the merits of the present invention can be assessed without reference to an individual piece of prior art.

The decision under appeal

5. The decision finds the claims of the main and first auxiliary requests to be unclear, due to several terms with unclear meaning such as the "technical teaching" and its "elements", the notions of "fundamental facts" and "kinds", and the "ANC matrix" (reasons 10.1), and several further problems including the facts that the method of claim 1 is specified as one of "analysing" although an analysis step is missing from the claim (see reasons 10.6 and 16.4), that the possible queries are not properly defined (see reasons 10.13), and that it is unclear what the computer actually does and how the ANC matrix is used in this context (see esp. reasons 10.11, 10.12 and 16.5).

Articles 69 and 84 EPC

6. The appellant contested all clarity objections.

6.1 It reasoned inter alia that the examining division had failed to interpret the claims in the light of the patent specification as a whole, as required by Article 69 EPC. Applying Article 69 EPC in examination was necessary to ensure that the same claim interpretation was considered when an examining division assessed patentability and when a court
determined the extent of protection of a claim (see the grounds of appeal, section III.1, page 2, last paragraph, to page 3, paragraph 2).

6.2 Alternatively, the appellant argued that it was a general principle of law that claims had to be interpreted in the light of the specification (see the appellant's letter of 6 June 2017, page 2, paragraph 2).

7. The board takes the following view.

7.1 Article 84 EPC concerns the European patent application. It stipulates inter alia that the claims shall be clear and concise and be supported by the description.

7.2 Article 69 EPC relates to the extent of protection conferred by a European patent or a European patent application, and stipulates in its paragraph 1 that this is determined by the claims, which in turn are to be interpreted in view of the description and drawings. Its paragraph 2 further explains that the extent of protection of a European patent application is determined retroactively by the extent of protection of the European patent, on the implicit condition that a patent is granted at all. As regards procedures before the EPO, the EPC refers to the extent of protection only once, namely in Article 123(3) EPC which provides that the European patent may not be amended in such a way as to extend the protection it confers. Therefore, Article 69 EPC does not apply per se to the examination procedure.
7.3 The board does agree, however, that, as a matter of principle, a patent claim cannot be interpreted in isolation but rather that reference may have to be made to the patent specification (see the same letter, page 2, paragraph 2, the paragraph bridging pages 2 and 3, and page 3, paragraph 3). In this regard, the board agrees with the decisions of the boards of appeal cited by the appellant, and specifically with the statements in T 860/93 (reasons 5.7) and T 556/02 (reasons 5.3) according to which "the positive requirement of Article 69(1) EPC" applies also in examination, and with that in T 61/03 (reasons 4.2) according to which a patent application "may be its own dictionary".

7.4 By virtue of Article 84 EPC, an examining division can and shall examine the clarity of the claims before it. A clarity objection obliges the applicant to consider amending the claims in the light of the patent specification. That is, even if it is possible to interpret a claim in the light of the patent specification, Article 84 EPC may oblige the applicant to make that interpretation explicit in the claim language.

7.5 When a claim has been clarified, it becomes easier and more predictable to determine its scope in examination (e.g. when assessing inventive step) or its extent of protection in post-grant procedures (according to Article 69 EPC). In the board's view, this is a main purpose of Article 84 EPC.

8. In view of the foregoing the board concludes that it is normally not sufficient for overcoming a clarity
objection to indicate that the claim can be interpreted in the light of the description.

9. The board also rejects the appellant's proposal to refer questions to the Enlarged Board of Appeal under Article 112(1)(a) EPC. Firstly, the board considers its position to be in line with the cited jurisprudence, so no decision from the Enlarged Board of Appeal is required in order to ensure uniform application of the law (see the appellant's letter of 6 June 2017, page 3, last paragraph). Secondly, for the purposes of this decision, the board has adopted a claim interpretation that was not challenged by the appellant, and has decided the present case on the basis of inventive step rather than clarity (see below). Thus, questions relating to Article 84 EPC (and, for instance, its relationship to Article 69 EPC) need not be addressed in the present decision.

10. The clarity of the claims to hand and in particular the clarity issues the board raised in its summons to oral proceedings are therefore left open.

Claim construction

11. In the annex to the summons to oral proceedings, the board summarised its understanding of the claimed subject-matter and, thus, how it intended to interpret the claims in order to assess its inventive merit. This analysis was not challenged by the appellant either in writing or in the oral proceedings.

12. The claimed method (according to claim 1 of all requests) has two phases. The first phase leads to the creation of the ANC matrix which, in the second phase,
is used to "automatically and instantly" produce responses to user queries.

12.1 The major part of the first phase is done by the user. Especially the generation of the ANC is under user control. Only the processing of user queries is meant to be automated. This is consistent with the appellant's summary of the situation given in the grounds of appeal (see page 7, paragraph 1).

12.2 More specifically, the user

- inputs the "technical teaching" TT.p underlying a patent (or such like) and that of the prior-art documents TT.i in terms of their "elements" and the "fundamental facts of these elements",
- identifies which elements in TT.p and TT.i correspond to each other and thus are "peer elements",
- selects and defines "information identifying or describing at least one item of the PTR or one law of nature or one National Patent System", and
- defines "all interrelations", especially which elements are anticipated or rendered obvious by other elements or groups of elements.

12.3 Moreover, the method claim refers to "compiling", based on user-input "first-kind items", a number of so-called (a)- to (c)-items and "inputting" these "second-kind items" into the computer and "process[ing]" them "to form an ANC" (see steps (a) to (d) in claim 1 of all requests).

12.4 Although the term "compiling" has a specific meaning in the field of computer programming, it also has the conventional non-technical meaning of "collecting" and
"assembling". In the board's understanding, the latter meaning applies to the claims in suit. In oral proceedings, the appellant did not challenge this interpretation. Accordingly, the claim is construed as specifying that the items mentioned are "compiled" and input by the user and "processed to form an ANC" under user control.

Technical effects and inventive step

13. In view of the foregoing, the board concludes that the major part of claim 1 (of all requests) is a modelling procedure during which the user considers the items in the domain of interest (comprising, specifically, the patent/patent application and the documents being compared, the laws of nature and the items of a national patent system), extracts their relevant properties (elements, facts, relations), and "compiles" them "into" a formal language.

13.1 Following T 49/99, the board considers this procedure of information modelling to be an intellectual activity (effectively a method for performing mental acts, Article 52(2)(c) EPC which does not, per se, contribute to the technical character of an invention). For this conclusion it is immaterial that the present application does not even relate to the modelling (let alone simulation) of a physical system but to the modelling of what a given set of documents discloses and how they relate to each other.

13.2 Accordingly, a technical contribution of the present invention could only lie in the way in which the generation and use of the model are implemented.
13.3 In the oral proceedings, the appellant essentially argued that particular features of the ANC data structure had to be considered to be technical. It stressed in particular that the ANC had to reflect the analysis of documents in terms of two different levels of granularity ("elements" and "fundamental facts of these elements") and that it contained novel fields (e.g. "anticipates/not-anticipates-and-not-contradicts/contradicts" as claimed).

13.4 However, the appellant did not argue that (or explain in what way) the particular ANC data structure had a specific technical advantage for the subsequent query processing. It was thus unable to convince the board that the modelling steps caused any technical effect. When, however, the modelling steps are assumed to be taken as an aim to be achieved in a non-technical field - according to established jurisprudence of the boards of appeal (see T 641/00, headnote 2) - the form of the ANC is determined by the model and thus obvious.

14. The computer support specified in claim 1 of all requests (see claim 1, lines 9-11 and 13) does not, in the board's judgement, go beyond the general statement that a computer is used to support the users in their task. Likewise, the feature that users may query the "items" in the ANC and the method replies "automatically and instantly by displaying to the user this item's information and all its such relations to other items" does not, in the board's judgement, go beyond the statement that the information in the ANC may be accessed by user queries, as is known from prior-art database systems.

14.1 The board considers that the above assessment applies to all three requests alike, and the appellant
confirmed during oral proceedings that, in this regard, the auxiliary requests did not raise new issues.

14.2 The board thus concludes that claim 1 of all requests lacks inventive step in view of common knowledge, as an obvious way of providing computer support to an essentially non-technical method, Article 56 EPC.

*Rule 103(1) (a) EPC*

15. The appeal fee cannot be reimbursed because the appeal is dismissed. It can therefore be left open whether the above-mentioned deficiency of the decision under appeal is a substantial procedural violation that would have made a reimbursement equitable.

**Order**

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

The appeal is dismissed.

The Registrar:                                    The Chairman:

B. Atienza Vivancos                               W. Sekretaruk

Decision electronically authenticated