Datasheet for the decision
of 8 May 2013

Case Number: T 0573/12 - 3.5.01
Application Number: 03029408.6
Publication Number: 1544764
IPC: G06F 17/60
Language of the proceedings: EN

Title of invention:
Automated process flow in product development

Applicant:
SAP AG

Headword:
Automated process flow/SAP

Relevant legal provisions:
EPC R. 103(1)(a), 137(3)

Relevant legal provisions (EPC 1973):
EPC Art. 56
EPC R. 86(3)

Keyword:
"Rule 137(3) EPC - discretion of Examining Division (improperly exercised)"

Decisions cited:
G 0001/88, G 0007/93
T 0690/09

Catchword: -
Case Number: T 0573/12 - 3.5.01

DECISION
of the Technical Board of Appeal 3.5.01
of 8 May 2013

Appellant: SAP AG
(Applicant)
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Decision under appeal: Decision of the Examining Division of the European Patent Office posted 2 November 2011 refusing European patent application No. 03029408.6 pursuant to Article 97(2) EPC.

Composition of the Board:
Chairman: S. Wibergh
Members: P. Scriven
P. Schmitz
Summary of Facts and Submissions

I. The appeal is against the Examining Division's decision to refuse European patent application 03029408.6, relating to a computer-implemented method for providing automated process flow in product development.

II. In its first communication, the Examining Division essentially stated that the claimed and described subject matter does not extend beyond the fields exempted from the field of patentable inventions by Art. 52(2) i.e. mental acts and programs for computers as such (see point 1.4), and [t]echnical character is referred to but substantiated in a concrete manner neither in the claims nor the description and drawings. The mental acts and computer programs being performed by a conventional computer cannot provide an inventive step (see point 1.5).

In response, by letter dated 2 December 2005, the appellant filed comments and an amended set of claims 1 - 14.

III. The Examining Division arranged for oral proceedings to be held in September 2009, and summoned the appellant accordingly. In an annex to the summons, the Examining Division reiterated its objections. The hearing was postponed pending the decision of the Enlarged Board of Appeal in the case G 3/08, and was subsequently rescheduled for 10 October 2011. With a letter dated 2 August 2011, the appellant sent a new set of claims and requested that a communication under Rule 71(3) EPC be issued on that basis.
IV. During oral proceedings, the Examining Division did not admit the request sent with the letter dated 2 August 2011. The appellant then argued that the previous request, sent with the letter dated 2 December 2005, had not been withdrawn and was still pending as an auxiliary request. The Examining Division disagreed, and, using its discretion under Rule 137(3) EPC (in the version of 2007), did not to admit this request either, and finally refused the application for lack of admissible requests.

V. In its notice of appeal, the appellant requested that the Examining Division's decision be set aside and that a patent be granted (main request) on the basis of the request submitted with the letter dated 2 August 2011, or else (auxiliary request) on the basis of the request submitted with the letter dated 2 December 2005. The appellant also requested reimbursement of the appeal fee, and, as a further auxiliary request, that oral proceedings be held.

VI. In the statement setting out its grounds of appeal, the appellant argued that the invention had technical character, so that the Examining Division had fallen into error when assessing inventive step. It further argued that the Examining Division had committed two procedural violations: firstly, the Examining Division had exercised its discretion in an unreasonable way by not admitting the main request; and, secondly, the Examining Division had been wrong to exercise discretion with regard to the admission of the auxiliary request.
VII. The Board held oral proceedings on 8 May 2013. The appellant's final requests were that the decision under appeal be set aside and that a patent be granted on the basis of claims 1 to 8 of the main request, filed with the letter dated 2 August 2011, or claims 1 to 14 of the auxiliary request, filed with the letter dated 2 December 2005; and, additionally, that the appeal fee be reimbursed.

VIII. Claim 1 according to the main request reads as follows.

A computer-implemented method for providing automated process flow in computer aided product development, with the steps of:
defining a structured data object (204), whereby within said structured data object (204) at least one recipe, and at least one formula is defined,
defining trial stages within said, product development,
defining object types within said data object referring to said trial stages, each type referring to a different trial stage;
instantiating an instance (204a-204d) of said data object (204) from said data object definition,
specifying a type of said instance from one of said object types,
automatically providing said at least one recipe and/or said at least one formula to a user according to the specified type, while hiding from user access the recipes and formulae, which are not assigned to the specified type;
storing process results for a respective trial stage within said instance (204a-204d), wherein for each trial stage a new instance (204a-204d) of said data object (204) is created and wherein for a new instance (204a-204d) of a data object (204) at least some of the results of a previous stage are copied; and wherein said recipe comprises process flow instructions, said process flow instructions being assigned to object types, and said process flow instructions defining a succession of object states, wherein said states are changed according to user selections in a succession provided by said process flow.
IX. Claim 1 according to the auxiliary request reads as follows.

A computer-implemented method for providing automated process flow in product development, in particular in computer aided product development, with the steps of defining a structured data object, whereby within said structured data object at least one recipe, and at least one formula is defined, defining trial stages within said, product development, defining object types within said data object referring to said trial stages, instantiating an instance of said data object from said data object definition, specifying a type of said instance from one of said object types, providing said recipe and/or said formula to a user according to the specified type, storing process results for a respective trial stage within said instance.

X. The appellant's arguments can be summarised as follows.

The invention solved a technical problem in the field of software engineering. It used technical means, and involved technical considerations. The method was computer-implemented and concerned computer-aided development. The invention, therefore, had technical character (T 258/03, Auction Method/HITACHI, OJ EPO 2004, 575).

The invention solved the technical problems of more efficiently managing the automated process flow and the information generated during trial, of improving its reliability, and of improving its user-friendliness.

Although the application as filed did not mention object-oriented programming, the skilled reader of the application would, nevertheless, understand the term "object" in that sense. In that context, the use of instances of a structured data object was a technical
feature that was not "notorious" and that would not have been obvious. Nor was the technical feature of copying from one instance to another "notorious" or obvious.

The Examining Division acted unreasonably in not admitting the main request. It failed to balance the appellant's interests in obtaining a valid patent against the EPO's interests in an effective procedure. The procedure, in this case, would not have taken longer, if the substance of the main request had been considered. By concentrating on the amendments introduced in claim 1, the Examining Division deprived the appellant of the opportunity of bringing forward its full argumentation.

The auxiliary request, which had been validly introduced into the procedure, because it was a response to the first communication, had never been withdrawn. Thus, there was no room for discretion under Rule 137(3) EPC.

Reasons for the Decision

1. Inventive step, main request

1.1 It is common ground that the invention is concerned with an administrative procedure. The development of a product involves various stages, with trials at different scales. For example, a trial may involve the making and evaluation of a working prototype; or it may address the design or re-design of a factory so that a new product can be made. Although some trials in the
development process might involve technical issues, the invention applies to any trials in the development of a product, including trials that do not involve technical considerations. The appellant has not sought to derive a technical effect from the trials themselves.

1.2 The application defines a trial as "the manufacture of a product by using a recipe" (published application, paragraph [0005]), with different recipes being needed for different trials (paragraph [0008]). The application finds the following shortcomings in the prior-art, non-technical methodology of product development (paragraph [0008]).

WITH KNOWN METHODS, IT IS NOT POSSIBLE TO RECYCLE DATA, WHICH HAVE ALREADY BEEN ACQUIRED DURING PREVIOUS STAGES. FOR EACH STAGE, THE RELEVANT INFORMATION HAS TO BE MANUALLY COPIED. ALSO, PROCESS FLOW IS NOT SUPPORTED. FURTHERMORE, USERS ARE NOT PROVIDED WITH A DATA STRUCTURE THAT GUIDES THEM THROUGH THE DIFFERENT STAGES OF A PRODUCT DEVELOPMENT PROCESS.

1.3 That passage is not easy to interpret. It is, for example, difficult to see why the recipes which are used in the different trial stages do not count as a "data structure that guides [users] through the different stages." Equally difficult to see is why "it is not possible to recycle data" if those data are "manually copied." However, it is the Board's view that the choices of which data are presented to the people implementing a particular trial, and of which data are retained and used for subsequent trials, are a part of the underlying administrative process. As such, it does not matter whether such choices were new or obvious, because they cannot contribute to inventive step.
1.4 Underlying the computer-implemented method defined in claim 1 is the following non-technical method:

- DEFINING STRUCTURED DATA INCLUDING AT LEAST ONE RECIPE AND AT LEAST ONE FORMULA, THE AT LEAST ONE RECIPE COMPRISING PROCESS FLOW INSTRUCTIONS;
- DEFINING TRIAL STAGES;
- FOR EACH TRIAL STAGE,
  -- COPYING AT LEAST SOME RESULTS FROM A PREVIOUS STAGE (IF THERE HAS BEEN ONE),
  -- PROVIDING SAID AT LEAST ONE RECIPE AND/OR SAID AT LEAST ONE FORMULA, WHILE HIDING RECIPES AND FORMULAE WHICH ARE NOT RELEVANT TO A PARTICULAR TRIAL STAGE,
  -- STORING PROCESS RESULTS FOR A RESPECTIVE TRIAL STAGE, MODIFYING THE PROCESS FLOW AS A RESULT OF ACTIONS WITHIN TRIAL STAGES.

1.5 It is legitimate to consider the invention from the point of view of a skilled person faced with the task of providing a tool for managing data for this non-technical method.

1.6 The Board considers that it would have been obvious to use a computer, because the tool would be primarily concerned with capturing, storing, copying and presenting data. That is what a general-purpose computer is good at. The Board considers that such a computer was "notorious," so that documentary evidence is not necessary.

1.7 The invention would have been obvious, if the skilled person would have stored the structured data in an object, instantiated as different types for each trial stage; if she would have arranged for the presentation
of relevant information to be automatic; and if she would have arranged for the copying of results from an earlier stage.

1.8 The appellant argued that the skilled reader of the application would understand the term "object" in the sense of object-oriented programming, although the application did not mention object-oriented programming at all. That was because the terminology "object" and "instantiating" was typical of that approach to programming.

1.9 In the Board's view, the terminology would remind the skilled person of object-oriented programming. However, if the term "object" were meant to be limited in that way, the application would and should have said so. Indeed, the appellant accepted, during oral proceedings before the Board, that the structured data object might be a database or a text file. The Board, therefore, considers that the term "object" refers to any data structure that the skilled person finds convenient given the tasks of storage and copying that the method requires. On that view, "instantiating" would amount to copying some (portion of) the data, in the form, say, of a recipe for one trial stage. In the Board's view, such an "object" and such "instantiating" are required by the underlying non-technical method, and the skilled person would have had no choice but to provide those features.

1.10 Similarly, the copying of data from earlier stages is part of the underlying method, because, as outlined above, the choice of what information to pass from one stage to the next is not a technical issue. The
question of how the copying should be carried out in a particular computer is a technical issue, but the claimed method does not deal with that.

1.11 During oral proceedings before the Board, the appellant argued strongly that the use of instances of a structured data object and the copying of data from one instance to another would not have been obvious, and that, at the very least, they were not "notorious" prior art. As already explained, the Board does not consider that the term "object" can be given the narrower meaning for which the appellant argued and from which it derived its view on obviousness. Thus, the Board rejects the first of the appellant's arguments. The second argument is also rejected: the choice of what data to present at each stage, and of what data to copy to later trials is not a technical matter, as explained above.

1.12 The Board concludes that claim 1 defines subject matter that does not involve an inventive step (Article 56 EPC 1973). As a result, the main request cannot be allowed.

2. Inventive step, auxiliary request

2.1 Claim 1 according to this request is broader than claim 1 according to the main request. Since the main request fails for lack of inventive step, the auxiliary request must fail for the same reason.

3. The request for reimbursement of the appeal fee.

3.1 The appellant requested reimbursement of the appeal fee. He was of the view that the Examining Division had
committed a procedural violation by exercising its discretion in an unreasonable way when not admitting the main request filed with letter of 2 August 2011.

3.2 The Examining Division gave only one reason for not admitting that request: it was prima facie not adequate to overcome the previously notified defects (point 2.1.2.7 of the impugned decision).

3.3 According to Rule 137(3) EPC (in the applicable version of December 2007, which is identical to former Rule 86(3) EPC 1973) any amendment after the reply to the first communication needs the consent of the Examining Division. This means that the Examining Division has discretion. One of the criteria applied in this context and accepted by the Boards of Appeal is whether the amendment prima facie overcomes objections previously raised. However, as set out in G 7/93 (OJ EPO 1994, 775), an Examining Division when considering whether to admit an amendment or not is required to consider all relevant factors which arise in the case. In particular it must consider and balance the applicant's interest in obtaining a patent and the EPO's interest in bringing the examination procedure to a close.

3.4 In the present case, the Board notes that the Examining Division's first communication was rather vague and assessed the invention in rather general terms, without analysing the individual features. In particular, it was not clear whether the objection was that the invention as claimed was a mental act (as suggested at point 1.4) or technical but lacking an inventive step (as suggested at points 1.5 and 1.7). The appellant's subsequent amendment added some features to the
independent claims, with the aim of emphasising the technical character of the invention. In the Board's judgment, this was a bona fide reaction. Additionally, it was the first amendment which was dependent on the Examining Division's consent and the minutes show that the Examining Division could and did discuss the added features, indeed the whole subject matter of amended claim 1, at the oral proceedings. Admitting the request would not have involved excessive or unjustified additional work. The Guidelines for Examination (Part C-VI, 4.7, in the version of April 2010) state that, "Regarding less extensive amendments, the examiner should adopt a reasonable approach, trying to balance fairness to the applicant against the need to avoid unnecessary delay and excessive and unjustified additional work for the EPO." Given the above circumstances, the Board is of the view that the Examining Division did not properly balance all relevant factors and thus cannot endorse the Examining Division's conduct.

3.5 The appellant also requested the refund of the appeal fee on the grounds that the Examining Division had unlawfully exercised discretion it did not have, when declining to admit the request filed with letter of 2 December 2005. That request had never been withdrawn and, accordingly, was the first amendment under Rule 86(3) EPC 1973 (which was in force at that time). Accordingly, the Examining Division had no discretion as to its admission.

3.6 The Board does not share this view. With the letter dated 2 August 2011, the appellant filed an amended set of claims and requested the issue of a communication
under Rule 71(3) EPC based on those documents. Nowhere in its letter did the appellant maintain the former request as an auxiliary request. Generally, when a new request is presented, and grant is requested on the basis of it, the former request is implicitly withdrawn. The Board does not agree that there is an implicit condition that if the new request is not admitted, the former request still stands. There is also no ambiguity which would have to be clarified. It is up to the applicant clearly to say so, if it maintains the former request as an auxiliary request. As explained in G 1/88 (OJ EPO 1989, 189), the withdrawal of the former request does not mean that the applicant abandons substantive rights, but only that it no longer puts this request forward for a decision. It can later be re-submitted, but the re-submission is then to be considered as a further amendment. That is confirmed by decision T 690/09 TCP offloading and uploading/BROADCOM (not published in OJ EPO), in which the Board stated that, if the Examining Division refuses consent to the latest submitted amended set of claims, that does not automatically revive the previous set of claims, unless the applicant had indicated that it was relying on these as an auxiliary request.

3.7 Accordingly, the Examining Division had discretion as to whether or not to admit this request. The only reason given for not admitting it was, that the appellant relied only on arguments already submitted earlier, which could not overcome the previously raised objections. In this context, it has to be emphasised again that these previous objections were not very clear and were in very general terms. Additionally, in such a situation further factors must also be weighed:
that this amendment was one which had originally been validly introduced into the procedure and that by not admitting the former request, the appellant would not get a substantive decision on any request at all. These are considerations which should also have been taken into account.

3.8 Notwithstanding these deficiencies, a remittal to the Examining Division pursuant to Article 11 RPBA would have served no purpose, since the Board was in a position to decide the case itself. The request for reimbursement of the appeal fee is to be rejected because, as set out above, the appeal cannot be allowed (Rule 101(1)(a) EPC).

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar

The Chairman

T. Buschek

S. Wibergh