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**Datasheet for the decision
of 20 October 2009**

Case Number: T 1701/07 - 3.5.03

Application Number: 02251118.2

Publication Number: 1233376

IPC: G05B 19/401

Language of the proceedings: EN

Title of invention:

Information processing apparatus and method

Applicant:

CANON KABUSHIKI KAISHA

Opponent:

-

Headword:

-

Relevant legal provisions:

EPC Art. 56, 84

RPBA Art. 13(1)

Relevant legal provisions (EPC 1973):

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Keyword:

"Inventive step (main and first auxiliary request - no)"

"Support by the description (second auxiliary request - no)"

"Late filed auxiliary requests - not admitted"

Decisions cited:

-

Catchword:

-



Case Number: T 1701/07 - 3.5.03

D E C I S I O N
of the Technical Board of Appeal 3.5.03
of 20 October 2009

Appellant:

CANON KABUSHIKI KAISHA
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Tokyo (JP)

Representative:

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Decision under appeal:

Decision of the Examining Division of the
European Patent Office posted 21 February 2007
refusing European application No. 02251118.2
pursuant to Article 97(1) EPC 1973.

Composition of the Board:

Chairman: A. S. Clelland
Members: B. Noll
M.-B. Tardo-Dino

Summary of Facts and Submissions

- I. This appeal is against the decision of the examining division posted on 21 February 2007 to refuse European patent application No. 02251118.2 on the ground that the subject-matter of claim 1 lacked an inventive step (Articles 52(1) and 56 EPC).
- II. The applicant appealed this decision and requested that it be set aside and a patent be granted on the basis of a new set of claims filed with the statement of grounds.
- III. In a communication accompanying a summons to oral proceedings the board gave a preliminary opinion that claim 1 was open to objections of lack of clarity (Article 84 EPC) and added matter (Article 123(2) EPC), as well as lack of novelty (Article 54(2) EPC) and lack of inventive step (Article 56 EPC) having regard to the disclosure of the following document:
- D1: JOHN WILSON: "AutoCAD 2000 - 3D Modeling, a Visual Approach" 2000, AUTODESK PRESS, THOMPSON LEARNING, USA
- IV. In a response to the summons a replacement set of claims was filed on 18 September 2009.

In the course of the oral proceedings held on 20 October 2009 the appellant filed additional sets of claims of first and second auxiliary requests. It was requested that a patent be granted on the basis of claims 1 to 14 as filed on 18 September 2009 as a main request or, in the alternative, of claims 1 to 3 of the

first or second auxiliary requests as filed during the oral proceedings.

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

"An information processing apparatus (203) for preparing at least one image for use in inspecting (S109) an object manufactured based on a 3D computer model of the object, the information processing apparatus comprising:

attribution input means (203) for entering attribution information for a 3D computer model, wherein the attribution information comprises dimensions of the object; and

image data generating means for generating image data for displaying an image of the 3D computer model including the dimensions;

characterised in that the information processing apparatus further comprises:

attribution categorization means for sorting the entered attribution information into a plurality of groups, each group comprising one or more dimensions to be measured when the manufactured object is inspected; and

control means for causing the image data generating means to generate, for each said group, image data for displaying images of the object, including the dimensions of the group, which guide an operator to measure the dimensions of the group in an assigned sequential inspection order."

Claim 1 according to the first auxiliary request adds to claim 1 of the main request the feature "wherein the control means is configured to cause the image data

generating means to generate image data for displaying all dimensions of a group together, a dimension to be measured next being highlighted to distinguish it from other dimensions of the group".

Claim 1 according to the second auxiliary request adds to claim 1 of the main request the feature "wherein the control means is further operable to cause the image data generating means to generate image data for displaying only dimensions yet to be measured".

VI. After due deliberation, at the end of the oral proceedings the board's decision was announced.

Reasons for the decision

1. *Technical field and prior art*

The general technical field of the application is that of computer-integrated manufacturing and, more specifically, that of computer-assisted quality control for physical objects fabricated in a manufacturing process. The purpose of this quality control is to determine whether the manufactured object falls within given specifications.

As outlined in the section of the application headed "Related Background Art", computer-integrated manufacturing starts with a computer-aided design (CAD) process in which the technical drawings of an object are created, whilst additional information relevant for manufacture such as materials, dimensions, and tolerances is established with the assistance of an

appropriate program running on a computer system. Since D1 describes the properties of, and possibilities offered, by a CAD-program commercially available at the priority date of the application the board considers it the single most relevant prior art document.

2. *Claim 1 of the main request - Novelty (Article 54(2) EPC)*

The program described in D1, together with the computer on which it is run, constitute an information processing apparatus which assists a user in creating a 3D computer model of an object to be manufactured. The apparatus receives, from a user, model information - e.g. concerning the definition of the edges of the object - as a sequence of commands via the keyboard (cf. the first paragraph at page 20). Furthermore, the program provides the user with the possibility of entering attribute information such as the dimensions of the object. From the model and the attribute information the program creates views according to the requirements of the user.

D1 further discloses that the program enables the user to categorize the dimensions by grouping selected dimensions into a separate layer (cf. the first paragraph at page 462). The purpose of this grouping is to provide a view of the object in which only the dimensions relevant to this view are shown. This is achieved by the program by linking only the applicable dimension layer to a particular view and freezing all other dimension layers for that view. Examples for views of an object together with only a subset of all dimensions are shown in figure 6-17 at page 459 as

different 2D views of a single object, or in figure 6-19 at page 462 which shows a 3D side view of a model together with the dimensions only relevant to the side view.

Accordingly, D1 discloses all features of claim 1 save the following:

- the image prepared by the apparatus is "for use in inspecting" the manufactured object;
- each group of categorized attribution information comprises "one or more dimensions to be measured when the manufactured object is inspected"; and
- the dimensions of the group displayed in the image of the object "guide an operator to measure the dimensions of the group in an assigned sequential inspection order".

The additional features distinguish the claimed apparatus from the CAD-system described in D1 insofar as the use of the CAD-system for supporting an operator in manually measuring an object is not explicitly disclosed in D1. The board thus concludes that the apparatus according to claim 1 is novel having regard to the disclosure of D1.

3. *Claim 1 of the main request - inventive step (Article 56 EPC)*

3.1 According to page 1 of the appellant's letter of 18 September 2009 the invention serves "to compare the object with the computer model efficiently". In the course of the oral proceedings the appellant further stated that the technical problem to be solved by the invention is to improve the efficiency of an operator

in comparing the object with the computer model. The board notes however that the desired improved efficiency of the operator is in the ergonomic rather than the technical realm.

- 3.2 The board therefore considers that the acts of preparing images of an object and creating groups of dimensions to be measured on an object for use in inspection are, on their own, not of a technical nature but matters of labour organization to facilitate comparison of an object with a screen view by manual inspection. In any practical arrangement for inspection measurement an operator has to be provided both with data concerning the object to be inspected and a workflow list or checklist specifying the actions to be done and the order in which they should be done. Such tasks are not of technical nature but are generally known concepts of business or work planning.

In the board's view the technical problem to be solved can be defined as automating the presentation of the data required for the above-mentioned tasks related to inspection in order to improve an operator's efficiency.

- 3.3 The program described in D1 is intended to create views of the designed object for the purpose of technical production and will be understood by the skilled person as also serving to provide data for subsequent inspection. Contrary to the appellant's opinion, the use of the data derived from the program is in no way restricted to any particular step of the manufacturing process. The skilled person would therefore, having regard to the general nature of object inspection as set out at point 3.2 above, instruct the D1 program to

produce views of the object for assisting in inspection by taking advantage of the capability of the program of grouping dimensions in layers and assigning layers to appropriate views of the object. Thus the skilled person, seeking to improve an operator's efficiency in inspection and aware of the functionality of the program described in D1 would provide, without the exercise of inventive skill, a sequence of views of the object which are intended to guide the operator to measure the dimensions in an assigned sequential inspection order, thus arriving at the apparatus according to claim 1. The apparatus of claim 1 does not therefore involve an inventive step (Article 56 EPC).

3.4 The appellant argued that D1 was concerned with the creation of technical drawings of an object but did not consider any issues regarding post design manufacture. Even though it could be imagined that the solution as claimed could be implemented with the program described in D1, this program would only be considered as a basis for implementing the invention *ex post facto* once the problem of human error when measuring dimensions of an object had been recognized. Specifically the problem of missed dimensions was not known from the prior art.

3.5 Although the program described in D1 is primarily configured for designing objects, the board cannot see that the use of the program is intentionally restricted to the pre-manufacture stage. Furthermore, the possibility of human error in inspection measurement is, in the board's view, a latent problem which has been recognized in the art and usually counteracted by checklists which prescribe all actions to be performed by an operator. In the board's view, the skilled person

would without the exercise of inventive skill appreciate that the program described in D1 would permit a checklist to be replaced by generating the data for inspection from the data of the design, thereby minimizing the effect of human error. For these reasons the board is not convinced by the appellant's arguments.

4. *First and second auxiliary requests*

4.1 In accordance with Article 13(1) of the Rules of Procedure of the Boards of Appeal any amendment to a party's case after it has filed its grounds of appeal may be admitted and considered at the board's discretion. In the board's view, and in line with the established case law of the Boards of Appeal, one of the criteria for admitting further amendments to the claims is whether or not the amended claims are clearly allowable. In the present case, in the board's judgement, claim 1 of each of the two auxiliary requests is not clearly allowable for the following reasons:

4.2 The feature added in claim 1 of the first auxiliary request merely serves to facilitate identification by the operator of the dimension to be measured next. Leaving aside the question of whether this feature is of a technical nature, the board observes that marking in a table or list an entry which is being examined is a normal human activity, whether the entry is on paper or on a screen. Thus, highlighting an entry in an image created by a program running on a computer system is matter of ordinary workshop practice which does not require inventive skill. For this reason the apparatus

according to claim 1 of the first auxiliary request does not *prima facie* meet the requirement of inventive step (Article 56 EPC).

4.3 The feature added in claim 1 of the second auxiliary request again serves an ergonomic function, namely ensuring that the operator does not omit dimensions to be measured. The comments at point 4.2 above also apply to this request since the creation of checklists is a normal human activity. Moreover, it is not clear to the board what features enable the apparatus to distinguish between dimensions already measured and those still to be measured, so that *prima facie* the claim also lacks support in the description (Article 84 EPC).

4.4 In view of the above, and since the first and second auxiliary requests were only filed in the course of the oral proceedings and are not *prima facie* allowable, the board exercised its discretion pursuant to Rule 13(1) RPBA not to admit those requests into the proceedings.

5. *Conclusion*

As the main request is not allowable and the first and second auxiliary requests are not admitted the appeal as a whole cannot be allowed.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:

D. Magliano

A. S. Clelland