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**Datasheet for the decision
of 28 August 2007**

Case Number: T 0144/05 - 3.4.02

Application Number: 97908692.3

Publication Number: 0885380

IPC: G01M 19/00

Language of the proceedings: EN

Title of invention:

Real time/off line applications testing system

Patentee:

Ade Corporation

Opponent:

-

Headword:

-

Relevant legal provisions:

EPC Art. 113(1), 56

Keyword:

"Sale communication - opportunity to comment (yes)"
"Inventive step (yes)"

Decisions cited:

T 0802/92, T 0201/98

Catchword:

-



Case Number: T 0144/05 - 3.4.02

D E C I S I O N
of the Technical Board of Appeal 3.4.02
of 28 August 2007

Appellant: Ade Corporation
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Representative: Joly, Jean-Jacques
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Decision under appeal: Decision of the Examining Division of the
European Patent Office posted 6 September 2004
refusing European application No. 97908692.3
pursuant to Article 97(1) EPC.

Composition of the Board:

Chairman: A. Klein
Members: M. Rayner
M. Vogel

Summary of Facts and Submissions

I. The present appeal was filed on 15.11.04, the appeal fee being paid on the same date, the statement of grounds being filed on 17.01.05 and is against the decision of the examining division dated 06.09.04 refusing European patent application number 97 908 692.3, relating to a wafer testing system. In the examination and/or appeal proceedings, reference has been made to the following documents:

D1	US-A-5 257 206
D2	EP-A-0 364 138
D3	US-A-4 860 229

During the examination proceedings, the division issued a sole communication, in which objections were raised against all the claims presented, including, in particular, that the subject matter of independent claim 1 (directed to a testing system) lacked novelty over document D1 and that that of independent claim 8 (directed to a semiconductor wafer testing system) as well as that of claim 9, dependent therefrom, lacked an inventive step over document D2. In response to this communication, the applicant presented counter arguments, maintained claim 1 unamended, cancelled claim 7 and incorporated the content of claim 9 into that of claim 8, renumbering it to claim 7.

II. According to the decision under appeal, the examining division was of the opinion that the subject matter of the independent claim 7 to a semiconductor wafer system could not be considered to involve an inventive step within the meaning of Article 56 EPC having regard to

document D2. The division saw the subject matter of the this claim as differing over the disclosure of document D2 by virtue of being for testing wafers and in that real time controller applications are selected from the group consisting of movement of wafers being tested to and from a first wafer test station, operation of the first wafer test station for wafers being tested, and storage within a first database of data obtained by testing wafers at the first wafer test station. However, as the system of document D2 can be used in all automatic industrial manufacturing works, the skilled person would not hesitate to use the system in manufacturing semiconductor wafers. Moreover the plurality of real time applications disclosed in document D2 are machining centres, a measuring station, a washing station and a store. At least the measuring station is controlled by a corresponding control unit. Thus when wafers are the objects manufactured in the system of document D2, the measuring station is a testing station controlled by the control unit. Moreover, in relation to claim 8, the skilled person would provide offline applications in accordance with the circumstances without exercise of inventive skill.

III. The appellant requests that the decision under appeal be set aside and that a patent be granted on the basis of claims 1 to 12 and amended description presented with its letter dated 16.05.07. Furthermore, reimbursement of the appeal fee is requested.

IV. Independent claim 1 is worded as follows:-

" 1. A semiconductor wafer testing system comprising:
a plurality of real time applications (25) controlling

a plurality of real time functions;
a real time controller (24) operative with said plurality of real time applications (25);
a plurality of off line applications (30) controlling a plurality of off line functions independently of said real time functions;
a first wafer test station (16) in communication with said plurality of real time applications (25); and
a first database (26) in communication with said plurality of real time applications (25) and said plurality of off line applications (30),
wherein said real time applications (25) are selected from the group consisting of movement of wafers being tested to and from said first wafer test station (16), operation of said first wafer test station (16) for wafers being tested, and storage within said first database (26) of data obtained by testing wafers at said first wafer test station (16), and
wherein said off line applications (30) are selected from the group consisting of analysis of data in said first database (26), removal of errors in data of said first database (26), comparison of processed data to a model, update of processing applications, creation of application processes, characterization of wafers and sorting of wafers."

- V. The applicant submits that, as acknowledged by the examining division, document D2 fails to disclose a semiconductor wafer testing system, so that novelty with respect to this document is given. It is irrelevant to the question of inventive step whether the skilled person would hesitate to use the system of document D2 in manufacturing semiconductor wafers. The term "obvious" means that which does not involve the

exercise of any skill or ability beyond that to be expected of the person skilled in the art. Moreover, there is no basis in document D2 for the statement that the skilled person would provide the necessary offline applications. Furthermore document D2 is not concerned with minimising downtime, but discloses a system that includes a foreground and background environment. The background environment functions are merely performed for conveniently providing the operator with desired information relating to plant operations. The subject matter claim 1 is not therefore obvious over the disclosure of document D2.

- VI. The appellant also argued that, while a strict reading of the EPC does not prohibit refusal after a response to a first official communication without warning, it is well accepted that further invitations to the applicant to file observations are appropriate if it would appear likely that examination would proceed to the granting of a patent, indeed immediate refusal should be considered exceptional. Reference is made to, for example, decision T 0802/97 in this respect. While claims 1 to 6 were not amended after the first communication, if such an absence were interpreted as a lack of bona fide effort, an applicant could never argue that the analysis of the division was incorrect at the outset. As the applicant made a bona fide attempt to respond to the official communication, reimbursement of the appeal fee is requested. The deciding factor is not whether the applicant's arguments were or were not successful but rather whether the argument's were made in a good faith effort to advance the prosecution.

VII. In a communication issued during the appeal proceedings, the board observed that there is no submission that the appellant did not have a chance to comment on the objections of the examining division. An important line of argument in the appellant's case is that down time is reduced by virtue of the semiconductor wafer testing system applications selected as offline. However, claim 1, unamended after the first communication of the examining division, did not even mention semiconductor wafers. Even the amendment made to the second independent claim referring to semiconductor wafer testing after the first official action of the division did not specify the wafer testing system applications selected as offline. The case was not therefore really advanced by the response to the first communication, it was rather more a case of sticking to guns on a main claim that was subsequently dropped. It was not likely that the board would be sympathetic towards the appellant's request for reimbursement of the appeal fee.

Reasons for the Decision

1. The appeal is admissible.
2. *Substantive Patentability*
 - 2.1 As the technical area of the present invention relates to a wafer testing system, an appropriate starting point for consideration of substantive patentability is the disclosure of document D3. It is not explicitly disclosed in this document that data is stored in a database and there is novel subject matter relating to the off line applications. The subject matter claimed in claim 1 is therefore novel.

2.2 A general problem solved by the novel features is improving the system by using information offline rather than processing in real time, thus reducing downtime. If enhanced information is determined in the offline processing, the line is not stopped to wait because the offline functions are controlled independently of the real time functions. An example is that information relating to dimples is determined offline using stored thickness and optical reflectivity real time measurements. The problem and its solution cannot be considered derivable from document D3 without involving an inventive step.

2.3 "Providing offline applications in accordance with the circumstances", as mentioned by the examining division in support of its position against inventive step, can imply a knowledge of the "circumstances" relating to a semiconductor wafer testing system, which cannot be derived from the prior art available. In the case of document D2, the presenting to an operator, on request, of desired information via offline menus (see paragraph bridging columns 7 and 8) is not related to reducing downtime of a wafer testing system. Even a speculation that, say, parts of the watchdog controller 108, the alarm analysis 109 or the report unit 110 might be arranged to function offline, runs counter to the teaching of document D2, where these items are disclosed as responsible for handling the plant in real time (column 7, line 18 et seq.). Document D1 concerns a statistical process control system for an air separation plant and is even less relevant, being never cited by the examining division against inventive step. Moreover, nothing in the other documents in the file

causes to the board to doubt patentability of the subject matter of claim 1. Accordingly, this subject matter as well as that of the dependent claims, by virtue of their dependence from claim 1 (the board observes that claim 2 should obviously depend from claim 1), can be considered to involve an inventive step within the meaning of Article 56 EPC.

3. *Reimbursement of the appeal fee*

3.1 An examining division does not exceed its discretionary power by issuing a refusal after a single communication, providing that the decision complies with Article 113(1) EPC, i.e. it is based upon grounds on which the applicant has had an opportunity to present comments. That this is so has not been disputed in the present case.

3.2 It is arguable whether the case before the first instance was advanced by the first response of the appellant. However, even if the board accepts, *arguendo*, that in its response to the sole communication of the examining division, the appellant tried to deal with all the objections that had been raised, decisive is not this, but that the same objections persisted after the response. At all events, it can be assumed that the examining division did not think the examination would lead to granting of a patent.

3.3 The appellant has referred to the (subsequently amended) text of Part C, Chapter VI, section 4.3 of the Guidelines. The present board has nothing to add to the analysis of Board 3.5.1 in its decision T 0201/98 in

relation to this part of the Guidelines, in particular section 1.4 of the Reasons for that Decision:

" It is, in the Board's view, unfortunate that the Guidelines are worded in such a way as on the one hand to lead the applicant or his representative to expect a warning before rejection after a single communication and on the other hand to impute a moral culpability for rejection. The Board accepts that in the present case the appellant's response to the single communication was a bona fide attempt to deal with the examining division's objections. However it is the established jurisprudence of the Boards of Appeal that an examining division does not exceed its discretionary power, ..., by an immediate refusal..."

- 3.4 The appellants have also referred to appeal case T0802/97, a decision issued by the present board in a different composition. From that decision, it can be seen that there were a number of issues which are different to the present case. For example, the board had found a non-compliance with Article 113(1)(see the second paragraph of section 3 of the reasons for the decision). Furthermore, the division failed to rectify its decision under Article 109 EPC, despite reasons given for lack of novelty of an independent claim no longer applying to the claim amended on appeal (see the penultimate paragraph of section 3 of the reasons for the decision). Moreover, the examination division had stated in its sole communication, that in view of objections against clarity, a complete examination of the claims was not considered economic, giving in the sole communication a provisional opinion that the claims did not define patentable subject matter (see

section II of the Facts and Submissions). In its reasons for the decision, the board remarks that the statements made by the examining division created the impression that it was sufficient for the applicant to deal with clarity in his answer since final examination as to patentability was postponed.

3.5 Since facts of the nature mentioned in point 2.4 are not present in the present appeal and the corresponding reasons therefore not applicable, the board does not see a compelling reason in decision T 0802/97 for overruling the way the examining division exercised its discretion. In particular, the examining division did give an opportunity for response to its objections and had not indicated that further examination was postponed. Moreover, even the claims presented with the appeal, i.e. an independent claim specifying the off line applications, did not include anything which had not been dealt with by the division, so the division had no reason to rectify its decision. Thus, it is likely that even if the amendments presented on appeal had been effected following a further communication repeating the position of the examining division in its first communication, the result before the first instance would have been the same. The board therefore sees no procedural violation and considers the case had reached a point where it was ripe for appeal before the second instance.

3.6 It follows that there is no procedural violation and thus no reason to order reimbursement of the appeal fee under Rule 67 EPC.

4. The board is also satisfied that the application satisfies the other requirements of the Convention.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the first instance with the order to grant a patent based on the following application documents:

Description

Pages 1, 6 and 7 filed with the letter dated 16.05.2007

Pages 2-5 as published

Claims 1-12 filed with the letter dated 16.05.2007

Drawings Sheets 1/2-2/2 as published

3. The request for reimbursement of the appeal fee is refused.

The Registrar

The Chairman

M. Kiehl

A. G. Klein