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**Datasheet for the decision  
of 10 December 2015**

**Case Number:** T 0592/10 - 3.2.05

**Application Number:** 03017625.9

**Publication Number:** 1389528

**IPC:** B41J2/175

**Language of the proceedings:** EN

**Title of invention:**

Cartridge and recording apparatus

**Patent Proprietor:**

Seiko Epson Corporation

**Opponents:**

Pelikan Hardcopy Production AG  
Artech GmbH

**Relevant legal provisions:**

EPC 1973 Art. 100(a), 100(b), 100(c)

**Keyword:**

Inadmissible extension (no)  
Novelty (yes)  
Inventive step (yes)  
Sufficient disclosure (yes)

**Decisions cited:**

T 0939/92



**Beschwerdekammern  
Boards of Appeal  
Chambres de recours**

European Patent Office  
D-80298 MUNICH  
GERMANY  
Tel. +49 (0) 89 2399-0  
Fax +49 (0) 89 2399-4465

Case Number: T 0592/10 - 3.2.05

**D E C I S I O N  
of Technical Board of Appeal 3.2.05  
of 10 December 2015**

**Appellant I:**  
(Patent Proprietor)

Seiko Epson Corporation  
4-1, Nishi-Shinjuku 2-chome  
Shinjuku-ku  
Tokyo 163-0811 (JP)

**Representative:**

Hoffmann Eitle  
Patent- und Rechtsanwälte PartmbB  
Arabellastraße 30  
81925 München (DE)

**Appellant II:**  
(Opponent 01)

Pelikan Hardcopy Production AG  
Gewerbestrasse 9  
8132 Egg (CH)

**Representative:**

Meissner, Bolte & Partner GbR  
Widenmayerstrasse 47  
80538 München (DE)

**Party as of right:**  
(Opponent 02)

Artech GmbH  
Feldbachacker 10  
44149 Dortmund (DE)

**Representative:**

Kierdorf Ritschel Richly  
Patentanwälte PartG mbB  
Sattlerweg 14  
51429 Bergisch Gladbach (DE)

**Decision under appeal:**

**Interlocutory decision of the Opposition  
Division of the European Patent Office posted on  
11 January 2010 concerning maintenance of the  
European Patent No. 1389528 in amended form.**

**Composition of the Board:**

|                 |           |
|-----------------|-----------|
| <b>Chairman</b> | M. Poock  |
| <b>Members:</b> | O. Randl  |
|                 | G. Weiss  |
|                 | S. Bridge |
|                 | D. Rogers |

## Summary of Facts and Submissions

- I. The appeals of the patent proprietor (appellant I) and opponent 1 (appellant II) were directed against the interlocutory decision of the opposition division on the amended form in which the patent No. 1 389 528 could be maintained.

The opposition division had in particular considered the following documents:

L2/E1: EP 0 940 254 A2;

L3/E2: Dallas Semiconductor, DS1982 (23 pages).

For the sake of concision these documents are referred to as L2 and L3, respectively, hereafter.

- II. Oral proceedings before the board of appeal took place on 10 December 2015.

- III. Appellant I (the patent proprietor) requested that the decision under appeal be set aside and that the patent be maintained in amended form on the basis of claims 1 to 15 filed as main request during the oral proceedings before the Board.

Appellant II (opponent 01) requested that the decision under appeal be set aside and that the European patent be revoked.

The party as of right (opponent 02) requested that the appeal of appellant I be dismissed.

- IV. The two independent claims of the main request read as follows (for claim 1, the feature numbering used by the opposition division is given in square brackets):

"1. [1.1] A cartridge (10) that holds a recording material used for recording therein and is mounted on a recording apparatus (20), said cartridge (10) comprising:

[1.2] a memory (14) that stores information regarding said cartridge (10) in a non-volatile manner;

[1.3] an instruction reception module (15) that receives an external instruction including at least a specified address of said memory (14) with regard to a series of processing that involves rewriting a storage content of said memory (14); and

[1.4] a processing execution module (15) that executes the series of processing that involves rewriting the storage content at the specified address of said memory (14);

characterized by further comprising

[1.5] an output module (15, 12) that outputs specific data corresponding to the specified address itself after execution of the series of processing."

"15. A cartridge (10) that holds a recording material used for recording therein and is mounted on a recording apparatus (20), said cartridge (10) comprising:

a memory (14) that stores information regarding said cartridge (10) in a non-volatile manner;

an address decoder (15; 121,163,165) that receives an external instruction including at least a specified address of said memory (14) with regard to a series of processing that involves rewriting a storage content of said memory (14); and

a rewriting execution circuit (15; 165) that executes the series of processing that involves rewriting the storage content at the specified address of said memory (14);

characterized by further comprising an output circuit (15,12; 178) that outputs specific data corresponding to the specified address itself after execution of the series of processing."

V. Appellant I argued as follows:

a) Claim interpretation

The opposition division has incorrectly interpreted the expressions "rewriting a storage content" and "specific data corresponding to the specified address itself".

i) "rewriting"

The prefix "re" indicates that a repetition had to occur. The term has a generally accepted meaning, i.e. storing data at some location where such information had already been stored before. This is also clearly the meaning adopted in the patent where the content of the storage cell at the specified address is altered.

ii) "specified data corresponding to the specified address itself"

The word "itself" is basically superfluous and has been inserted in order to avoid confusion regarding the claimed subject-matter; it makes clear that the data somehow represents the address (and not the content stored at that address).

The expression "corresponding to" requires a direct relationship. For instance, CRC values calculated not only from the address but also other variables fail to establish a direct relationship with the address.

iii) "after execution of the series of processing"

The expression "series of processing" clearly has to involve rewriting the storage content at the specified address; the claim language is clear in this respect (see feature [1.4]).

b) Inadmissible extension

The insertion of the word "itself" has not altered the meaning of claim 1. The original wording already defines the specific data to correspond to the specified address and not the data stored at the address. The amendment was made to explicitly exclude the specific address to correspond to something different than data corresponding to the address. Paragraph [0011] is a suitable and sufficient basis for the amendment. There was no broadening of the meaning; the amendment excludes improbable interpretations.

c) Sufficiency of disclosure

The skilled person would not encounter serious problems hindering him from reproducing the invention.

d) Novelty

The subject-matter of claim 1 is clearly novel over the disclosure of documents L2 and L3, on three counts:

The combination of documents L2 and L3 does not disclose the feature of rewriting memory content. Document L3 explicitly excludes rewriting. The term has to be interpreted in the same way in the opposed patent

and in document L3. Rewriting is not possible in an EPROM. Document L3 discloses that the memory bits are set to "1" prior to programming.

There is no direct relationship between the address and the CRC of document L3, which depends not only on the address. A change in this CRC does not necessarily imply a change in the address.

The output of the specific data occurs at a different moment than in the state of the art, i.e. after execution of the series of processing. The claimed output module has to be configured to output after execution. The behaviour of the output module according to document L3 is not suitable. Different sequences of processing require structural differences. The output of the memory according to L3 is the data stored at the address and not information corresponding to the address in any way.

e) Inventive step

The feature that the specified data are returned after the processing is not disclosed in document L3. The only reason to check the data in the disclosed device is that the EPROM memory can only be written once. Therefore, it is important to output the value for verification before the writing takes place. If the EPROM is replaced by a rewritable memory such as an EEPROM, the skilled person would not have any reason to carry out such a verification.

VI. Appellant II argued as follows:

a) Claim interpretation



i) "rewriting"

The term encompasses any addition of data to the memory. It is irrelevant whether the data are erased beforehand or not.

ii) "corresponding to"

This expression does not require a direct relationship between the output data and the address. Moreover, data which change when the address changes have a direct relationship with the address as long as there are no intermediate transformation steps.

iii) "after execution of the series of processing"

The expression "series of processing" in feature [1.5] is to be understood as any sequence of process steps. It refers to the general definition given in feature [1.3] rather than to the more restricted series of processing mentioned in feature [1.4]

Feature [1.5] is a method feature and does not define the structure of the cartridge.

"After" does not define any specific delay.

b) Inadmissible extension

The insertion of the word "itself" has inadmissibly extended the claimed subject-matter. The expression "address itself" is absent from the original application, and there is no indication that data different from the address cannot be used for the computation of checksums, CRC codes etc. There is no

basis for such a disclaimer in the application as filed. Thus the amendment leads to an inadmissible intermediate generalisation.

c) Sufficiency of disclosure

Appellant I endorsed the objections of the party as of right (see below, point VII.c) in this respect.

d) Novelty

The subject-matter of claim 1 lacks novelty over the disclosure of documents L2 and L3.

No difference can be based on the fact that the opposed patent concerns an EEPROM, because the claims are not limited accordingly.

The concept of "rewriting" in document L3 means something different than in the opposed patent, i.e. the step after the first memory change, which could be qualified as "re-rewriting" or "reprogramming". The term has to be interpreted afresh in each document. In the opposed patent the expression "rewriting" has to be understood broadly. Both a mere writing operation and an erasing operation qualify as rewriting. The situation is even clearer when considering storing a byte at a time into storage.

The cartridge of documents L2 and L3 is suitable for outputting the specific data according to feature [1.5]. This can be seen by considering a situation where the same writing operation is carried out twice.

Feature [1.5] is also implicit for the skilled person because verification before and after the writing are part of his common general knowledge.

e) Inventive step

There was a trend away from EPROM toward EEPROM at the date of priority of the opposed patent, as can be seen from the state of the art cited.

The feature "after execution of processing" only solves the problem of changing the order of writing and outputting the verification data. It is obvious for the skilled person to verify the content of a chip after writing, in particular if an EEPROM is to be used instead of the EPROM.

VII. The party as of right argued as follows:

a) Claim interpretation

i) "rewriting"

Claim 2 makes clear that "rewriting" also encompasses mere "writing". The opposed patent also distinguishes between "rewriting" and "overwriting". Thus, whenever information is written into the memory, it is "rewritten" within the meaning of claim 1. The state of the art should not influence the interpretation of the feature as used in the opposed patent.

ii) "specified data corresponding to the specified address itself"

Cyclic redundancy check (CRC) data are encompassed by this expression, as can be seen from paragraph [0011] of the opposed patent.

b) Inadmissible extension

The insertion of the word "itself" has inadmissibly extended the claimed subject-matter. The original application does not disclose that the output has to comprise at least part of the original address data. If feature [1.5] is to be understood in such a way that it excludes the output of CRC data, then this is in conflict with paragraph [0011] of the original disclosure.

c) Sufficiency of disclosure

Method claim 21 of the patent as granted cannot be carried out over the whole breadth of the claim because the verification of the address does not allow to assess whether the storage content has been rewritten correctly. This insufficiency of disclosure also affects claims 1 and 15 of the main request because they aim to achieve the same effect, which cannot be obtained over the whole breadth of the claims.

d) Novelty

The subject-matter of claim 1 lacks novelty over document L3, in particular because the CRC disclosed therein destroy the novelty of feature [1.5]. The claims of the opposed patent are not limited to EEPROMS or bitwise rewriting.

e) Inventive step

Even if found novel, claim 1 lacks an inventive step over the prior art. The distinguishing feature provides no advantage. There are only two alternatives (output before and after writing). When an EEPROM is used, there is no reason to prefer having the output occur before rewriting.

## **Reasons for the Decision**

1. The application on which the opposed patent is based was filed on 11 August 2003; therefore, according to Article 7 of the Act revising the EPC of 29 November 2000 (Special edition No. 4, OJ EPO, 217) and the Decision of the Administrative Council of 28 June 2001 on the transitional provisions under Article 7 of the Act revising the EPC of 29 November 2000 (Special edition No. 4, OJ EPO, 219), Article 100 EPC 1973 applies in the present case.
2. Claim interpretation
- 2.1 "rewriting a storage content"

In its reasons for the decision the opposition division stated that

"... the term "rewriting" has been considered as covering steps where data is written after having erased the already stored data in the memory or added to already stored data in the memory" (point 1.6, last paragraph, underlining by the board).

No justification for this particular interpretation was offered.

The Oxford English Dictionary (OED) has the following definition for "rewrite" in the context of computing and electronics:

"to write (data) to a storage medium (now esp. a rewritable optical disc) for a second or further time; to replace the data on (a storage medium) with other data".

The original application does not provide a definition of the term. It mostly uses the invariable expression "... that involves rewriting a/the storage content ..." which as such does not provide any insight into the meaning of the term. The description of the preferred embodiments (see in particular paragraphs [0028] and [0029]) describes "rewriting or erasing" operations as alternatives. Another relevant passage is found on page 3, lines 3 and 4, where the application of an EEPROM is described:

"... the data rewriting procedure first erases the existing data in the memory and then new data into the memory (sic)".

The board finds these elements to be in line with the definition provided in the OED; it is of the opinion that the skilled person would understand "rewriting a storage content" to mean "**replacing data on a storage medium by new data**".

The fact that the opposed patent also uses the verb "overwrite" does not lead to a different understanding. In the passages in which some data is said to be "written ... over" wrong data (paragraphs [0066], [0068] and [0076]) the use of the verb

"rewrite" (i.e. "rewritten ... over") would be unnatural because it leads to semantic overload and suggests the idea of writing again, whereas in the context of an error the correct information is not written again (because at first some erroneous information had been written). Thus, what distinguishes "rewriting" from "overwriting" is the point of view: when a storage content is rewritten, the previous (possibly - but not necessarily - erroneous) content is overwritten.

2.2 "specific data corresponding to the specified address itself"

2.2.1 "itself"

The expression "specific data corresponding to the specified address itself" is not found in the application as filed; the word "itself" has been added during the examination proceedings. In its response to the official communication dated 25 February 2005, page 2, third paragraph, the applicant (now appellant I) made the following statement:

"The feature of the characterizing part of each of new independent claims 1,15 and 21 was clarified by inserting the term "itself" immediately after the expression "specified address" in order to make clear that the subject data is not read out of the address, but is output as corresponding to the address itself. This amendment is based, for example, on the disclosure on page 15, lines 14 to 17 of the description."

The board is satisfied that the word "itself" merely clarifies the subject-matter of claim 1. "Specific data corresponding to the specified address" could arguably

be understood to encompass data stored at the specified address, whereas "specific data corresponding to the specified address itself" can hardly be understood in that way. Paragraph [0011] of the opposed patent provides examples for "specific data corresponding to the specified address". It reads:

"The data output by the output module in response to the externally specified address may be any data corresponding to the specified address; for example, data identical with the specified address, data representing a predetermined part of the specified address, or a code induced from the specified address like a parity code, a hamming code, or a CRC. These codes desirably reduce the number of bits included in the output data, compared with the number of bits constituting the specified address."

All these examples are related to the address as such and not to the data stored at that address.

#### 2.2.2 "corresponding to"

The expression "corresponding to" has a wide semantic range but is most often used to express a relation of similarity or analogy. Data corresponding to an address may be expected to be data that are somehow related to the address. This is exactly what is conveyed by paragraph [0011] of the impugned patent (cited *in extenso* above, see point 2.2.1).

For the avoidance of doubt, the board wishes to emphasise that the addition of the word "itself" does not limit the output to the specified address or parts of it. Consequently, "specific data corresponding to the specified address itself" encompass the address as



such, parts of the address and even data derived from the address, such as checksums or a CRC based on the address.

Incidentally, the fact that the output module "outputs specific data corresponding to the specified address (itself)" does not exclude the possibility of further output that is different from data corresponding to the address.

2.3 "after execution of the series of processing"

Claim 1 requires the claimed cartridge to contain an instruction reception module that is designed to receive an address of the non-volatile memory "with regard to a series of processing that involves rewriting a storage content" of the memory (feature [1.3]). The claimed cartridge also contains a processing execution module designed to execute the series of processing that involves rewriting the storage content at that address (feature [1.4]). There is no reason to assume that the series of processing mentioned in feature [1.4] is different from the series of processing introduced in feature [1.3]; the addition "at the specified address" in feature [1.4] would be unnatural in feature [1.3] because there the series of processing is introduced in order to qualify the specified address.

Considering that, according to feature [1.5], the output module is designed to output specific data corresponding to that address "after execution of the series of processing", an unbiased reader of claim 1 would understand that this series of processing is the series of processing mentioned twice beforehand, i.e. in features [1.3] and [1.4], and that the

precision "that involves rewriting the storage content at the specified address of said memory" has been omitted from feature [1.5] for the sake of concision and readability.

Thus, it is clear from the overall construction of claim 1 that the "series of processing" referred to is the series of processing that involves rewriting a storage content of the memory.

The skilled person reading claim 1 would also understand that the expression "after execution of the series of processing" in feature [1.5] has to refer to the series of processing that immediately precedes the output of the specific data rather than a series of processing that may have occurred at an earlier time.

3. Inadmissible extension (Article 100 c) EPC 1973)

The objection according to which claim 1 has been inadmissibly extended by the insertion of the word "itself" is due to a misinterpretation of the subject-matter of the claim.

The interpretation of the disputed feature "specific data corresponding to the specified address itself" is discussed in detail under point 2.2 above. Accordingly, the word "itself" has been introduced to clarify that "data corresponding to the ... address" is not to be understood as "data stored at the address". Apart from this clarification, the amendment has no technical significance.

Based on this interpretation, the board has reached the conclusion that the independent claims are not objectionable under Article 100(c) EPC 1973.

4. Sufficiency of disclosure (Article 100 b) EPC 1973)

The board is unable to endorse the argument according to which the fact that the opposed patent did not teach how to verify that the series of processing that involves rewriting the storage content had been implemented normally (features of independent claims 16 and 21 as granted) in situations where the output data was identical to the specified address, would make it impossible for the skilled person to carry out the inventions defined by claims 1 and 15.

The technical effect which allegedly cannot be obtained over the whole breadth of claims 1 and 15 is not a feature of these claims. Therefore, even if it was established that this effect is not obtained, this finding could not possibly result in the skilled person being unable to carry out the invention defined by these claims. Rather, the finding that the effect is not obtained over the whole breadth of the claims might have consequences for the examination of the inventive step of the claimed subject-matter; it might make it necessary to reformulate the objective technical problem. It is, however, not relevant for the examination of whether the disclosure of the invention is enabling.

As a consequence, the objection under Article 100 b) EPC 1973 has to fail.

5. Novelty (Article 100 a) and Art. 54 EPC 1973)

The opposition division was of the opinion that the features of document L3 were included in document L2 by cross reference. This has not been contested by the

parties, and the board does not see any good reason not to adopt this finding. Therefore, the novelty of the subject-matter of claim 1 is examined with respect to the disclosure of the combination of documents L2 and L3.

It is undisputed that document L2 in combination with document L3 discloses a cartridge which holds a recording material (ink) and is mounted on a recording apparatus, and which comprises:

- a memory that stores information regarding the cartridge in a non-volatile manner;
- an instruction reception module that receives an external instruction including at least a specified address of said memory with regard to a series of processing that involves modifying a storage content of the memory;
- a processing execution module that executes the series of processing that involves modifying the storage content at the specified address of said memory;
- an output module that can output specific data based on *inter alia* the specified address itself (CRC).

There was disagreement, however, on whether document L2 in combination with document L3 discloses that the series of processing involves rewriting a storage content of the memory and whether the output module outputs specific data corresponding to the specified address itself after execution of the series of processing.

5.1 Feature [1.3]: "rewriting"

The novelty of this feature over the disclosure of the combination of documents L2 and L3 critically depends on whether the storage content of the DS 1982 EPROM "add only" memory can be said to be "rewritten".

As explained above (see point 2.1), the board has reached the conclusion that "rewriting a storage content" within the meaning of the claim is to be understood as "replacing data on a storage medium by new data".

According to document L3, in the DS 1982 EPROM "[p]rior to programming the entire unprogrammed 1024-bit EPROM data field will appear as logical 1s. For each bit in the data byte provided by the bus master that is set to a logical 0, the corresponding bit in the selected byte of the 1024-bit EPROM will be programmed to a logical 0 after the programming pulse has been applied at that byte location." (page 12, antepenultimate paragraph).

Thus, in a device according to L2 using a DS 1982 EPROM the processing involves rewriting a storage content of the memory, because the value "1" of the bit is replaced by the value "0".

Consequently, feature [1.3] is disclosed in document L3.

The fact that document L3 states that "... it is not possible to simply rewrite a page if the data requires changing or updating ..." (page 6, 4th paragraph) does not lead to a different conclusion. This passage does not make a general statement on rewriting but states the impossibility of simply rewriting a page under certain conditions. More importantly, what is decisive here is how the expression "rewrite" is to be

interpreted in the claim and whether document L3 discloses a technical feature that qualifies as "rewriting" within the meaning of the claim. Whether document L3 uses the same language or not is not relevant for the assessment of novelty.

## 5.2 Feature [1.5]

The crucial issues in respect of novelty over the combination of documents L2 and L3 consist in whether the output of the cartridge corresponds to the address itself and whether the output occurs after execution of the series of processing.

- (a) "outputs specific data corresponding to the address itself"

As explained above (see point 2.2.2), the board has reached the understanding that the "specific data corresponding to the specified address itself" encompass the address as such, parts of the address and even data derived from the address, such as checksums or a CRC based on the address.

Document L3 discloses the output of CRC information, which is calculated from *inter alia* the address data (see Fig. 6, page 10).

The board remains unpersuaded by the argument that such CRC values do not qualify as data corresponding to the address itself because they are not directly related to the address. The claim language does not require a direct one-to-one relationship but only some correspondence. It is not unreasonable to consider that CRC values calculated from command and address data correspond to the command and the address and thus

qualify as data corresponding to the specified address itself.

Therefore, this part of feature [1.5] is disclosed in document L3.

(b) "after execution of processing"

This feature is not disclosed in document L3 because in the DS1982 EPROM the bus master issues a programming pulse after verification of the CRC value when the data byte is still only in the scratchpad and not yet written into the EPROM memory (page 14, second paragraph: "... If the CRC is correct, the bus master will issue a programming pulse and the selected byte in memory will be programmed."). The specific data, therefore, are output before execution of the series of processing which includes (re)writing.

When examining the actual differences of a cartridge according to claim 1 with respect to a prior art cartridge, it must be borne in mind that claim 1 is a device claim and not a method claim. Thus, the fact that the address data is output "after execution of the series of processing" can only establish a difference if it entails structural differences. In other words, if the prior art cartridge is suitable for providing the output after execution of the series of processing, this feature cannot establish the novelty of claim 1, even if this particular timing is not disclosed in the prior art.

In the cartridge according to the combination of documents L2 and L3 the timing of the output has a structural counterpart, because of the particular integrated circuits involved. As the DS1982 is not

freely programmable in this respect, if the output had to be made to occur after the programming pulse, the circuits would have to be modified.

Notwithstanding this structural difference, appellant II and the party as of right have based their argumentation regarding the suitability of the device according to documents L2 and L3 on the example of two subsequent writing operations concerning the same address. In such a situation the CRC value corresponding to that address would be output and then the first programming pulse would be issued. Subsequently the (same) CRC value would be output again before the second programming pulse would be issued. Thus, the output of the second (but identical) CRC value would occur after the first programming pulse.

However, the board cannot accept that this fictitious situation corresponds to feature [1.5]. As pointed out above (see point 2.3), the expression "after execution of the series of processing" in feature [1.5], when correctly interpreted, refers to the series of processing associated with the writing operation initiated when the instruction reception module received the corresponding instruction, i.e. the one that immediately precedes the output of the specific data. This is not what occurs in the device according to documents L2 and L3, even in the case of two subsequent identical operations, because then each output still occurs before execution of its corresponding series of processing.

Also, the assertion that the possibility of the verification taking place before and after the processing is part of the common general knowledge of the skilled person, cannot alter the fact that there is



no direct and unambiguous disclosure of this part of feature [1.5] in documents L2 and L3.

- 5.3 Therefore, the subject-matter of claim 1 of the main request is new within the meaning of Article 54(1) EPC 1973 over the disclosure of documents L2 and L3, because the output module outputs specific data corresponding to the specified address itself after execution of the series of processing.

The subject-matter of claim 15 is novel for the same reason.

6. Inventive step (Article 100 a) and Art. 56 EPC 1973)

- 6.1 Closest prior art

It is undisputed that document L2 together with document L3 constitutes the closest prior art.

- 6.1.1 Differences

As stated above (see point 5.3), the subject-matter of claim 1 differs from the disclosure of documents L2 and L3 in that the output module outputs specific data corresponding to the specified address itself after execution of the series of processing rather than before execution.

- 6.1.2 Obviousness

The board cannot endorse the reasoning of the opposition division according to which the claimed subject-matter lacks inventive step because writing into the memory before or after the check are two common known solutions falling within the common

general knowledge of the skilled person. This argument disregards the precise nature of the closest prior art.

The device according to document L3 is an EPROM, i.e. a memory in which the content of each bit can only be altered once. In such a context it is important to verify the address before the programming pulse takes place, because a detection of the error after the programming would make it impossible to avoid the loss of the memory cell. Thus there is good reason not to alter the timing of the output with respect to the programming pulse.

It may be true that at the priority date of the opposed patent there was a general trend away from EPROM and toward EEPROM, and that the skilled person contemplating the teaching of document L2 at that time would have considered using an EEPROM rather than the EPROM disclosed in document L3. However, when proceeding in this way, the skilled person would have had no reason to maintain the verification taught in document L3, because there would no longer be a risk of losing a storage cell. There is no evidence on file that the skilled person would have envisaged a corresponding output if an EEPROM was to be used. Most likely the replacement of the particular EPROM disclosed by L3 by an EEPROM would have led the skilled person to abandon this specific output altogether.

Thus the board has reached the conclusion that appellant II and the party as of right have not established that the subject-matter of claim 1 was obvious to a person skilled in the art within the meaning of Article 56 EPC 1973.

The same reasoning applies to claim 15.

The party as of right has pointed out that in case the board found the invention to be disclosed in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art, the claimed subject-matter would be obvious according to decision T 939/92 (OJ EPO 1996, 309).

This decision deals with chemical compounds and states in its headnotes:

"1. If a claim concerns a group of chemical compounds per se, an objection of lack of support by the description pursuant to Article 84 EPC cannot properly be raised for the sole reason that the description does not contain sufficient information in order to make it credible that an alleged technical effect (which is not, however, a part of the definition of the claimed compounds) is obtained by all the compounds claimed (see reasons 2.2.2).

2. The question as to whether or not such a technical effect is achieved by all the chemical compounds covered by such a claim may properly arise under Article 56 EPC, if this technical effect turns out to be the sole reason for the alleged inventiveness of these compounds (reasons 2.4 to 2.6)."

Regardless of whether the teaching of this decision can be extrapolated beyond the field of chemical compounds, it has to be noted that in the present case, the technical effect that allegedly is not obtained over the whole breadth of the claim - i.e. provide a means of verifying that the series of processing that involves rewriting the storage content had been implemented normally - is not the sole reason for the

inventiveness of the claimed subject-matter. The reasons why the board has found the subject-matter of claim 1 not to be obvious are related to the nature of the closest prior art and considerations what the skilled person would have done when considering a replacement of an EPROM by an EEPROM. Therefore, the reasoning that is expressed in decision T 939/92 does not lead the board to a different conclusion in respect of the inventive step of the invention.

## Order

### For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the opposition division with the order to maintain a patent in amended form on the basis of claims 1 to 15 filed as main request during the oral proceedings before the Board and drawings and description to be adapted.

The Registrar:

The Chairman:



D. Meyfarth

M. Poock

Decision electronically authenticated