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**Datasheet for the decision
of 9 July 2019**

Case Number: T 0792/16 - 3.5.05

Application Number: 00306738.6

Publication Number: 1079300

IPC: G06F3/14

Language of the proceedings: EN

Title of invention:

Method and apparatus for serially transmitting graphics data

Applicant:

ATI Technologies ULC

Headword:

Serially transmitting graphics data / ATI

Relevant legal provisions:

EPC Art. 123(2), 56

RPBA Art. 12(4)

EPC 1973 R. 76, 67, 71(2)

EPC R. 137(3)

Keyword:

Amendments - added subject-matter (yes) - intermediate
generalisation

Inventive step - obvious modification

Examination procedure - amendments - consent of examining
division (no) - correct exercise of discretion (yes)

Auxiliary request - identical to request not admitted in first
instance proceedings

Reimbursement of appeal fee - substantial procedural violation
(no)

Decisions cited:

Catchword:



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Case Number: T 0792/16 - 3.5.05

D E C I S I O N
of Technical Board of Appeal 3.5.05
of 9 July 2019

Appellant: ATI Technologies ULC
(Applicant) One Commerce Valley Drive East
Markham, Ontario (CA)

Representative: Williams, Michael David
Marks & Clerk LLP
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Decision under appeal: Decision of the Examining Division of the
European Patent Office posted on 2 November 2015
refusing European patent application No.
00306738.6 pursuant to Article 97(2) EPC.

Composition of the Board:

Chair A. Ritzka
Members: N. H. Uhlmann
D. Prietzel-Funk

Summary of Facts and Submissions

- I. The appeal is against the examining division's decision to refuse European patent application No. 00306738.6.
- II. The decision under appeal referred to the following documents:

D1 US 4 799 040;
D2 US 5 805 089;
D3 KENJI ISHIDA ET AL: "A 10-GHZ 8-B MULTIPLEXER/DEMULTIPLEXER CHIP SET FOR THE SONET STS-192 SYSTEM", IEEE JOURNAL OF SOLID-STATE CIRCUITS, IEEE SERVICE CENTER, PISCATAWAY, NJ, USA, vol. 26, no. 12, 1 December 1991, pages 1936-1942.
- III. The examining division held that the main request and auxiliary requests 1 and 2 did not meet the requirements of Articles 84 EPC and 123(2) EPC. Additionally, the division held that the main request and auxiliary request 1 did not fulfil the requirements of Article 52(1) EPC. Furthermore, auxiliary requests 3 to 5 were not admitted into the proceedings pursuant to Rule 137(3) EPC.
- IV. In a statement setting out the grounds of appeal, the appellant requested that the decision under appeal be set aside and that a patent be granted based on the claims of the main request, or one of first to fifth auxiliary requests, and the drawings and description on which the decision under appeal was based. The fifth auxiliary request was specified as a conditional amendment to all higher ranking requests. The appellant submitted further that the "proceedings before the examining division involved a substantial procedural violation" and requested a refund of the appeal fee.
- V. The board arranged for oral proceedings to be held.

VI. In the summons, the board set out its provisional view of the case. The board considered, *inter alia*, that the requirements of Articles 123(2), 84 and 56 EPC were not met and that the proceedings before the examining division did not involve a substantial procedural violation.

VII. In response, the appellant informed the board that it would not attend the oral proceedings.

VIII. Oral proceedings were held on 9 July 2019. As announced, nobody attended on behalf of the appellant.

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

"A method for transmitting graphics data, the method comprising the steps of:

receiving, at a first latch (501), a data word having an even number of bits;

providing, by a multi-phase clock generator (540), an odd number of multi-phased clocks;

receiving, at a second latch (502) from the first latch (501), a first subset of bits of the data word;

receiving, at a third latch (502) from the first latch (501), a second subset of bits of the data word;

wherein the first subset of bits of the data word and the second subset of bits of the data word includes [sic] all of the bits of the data word;

providing, by a multiplexor, only one of the first subset of bits of the data word and the second subset of bits of the data word at a time to a parallel to serial converter (505); and

converting, by the parallel to serial converter (505), the data word to a serial stream using the provided odd number of multi-phased clocks."

- X. Claim 1 of the first auxiliary request specifies further that both the first subset of bits and second subset of bits include an odd number of bits, and the subsets of odd numbered bits provided by the multiplexor are converted.
- XI. Claim 1 of the second auxiliary request additionally specifies that the first subset of bits and second subset of bits comprise the same number of bits.
- XII. Claim 1 of the third auxiliary request specifies further that the number of multi-phased clocks is equal to the number of bits of the first and second subset of bits.
- XIII. Claim 1 of the fourth auxiliary request specifies that the data word has ten bits, that five multi-phased clocks are provided and used, and that both the first subset of bits and second subset of bits comprise five bits
- XIV. In view of the outcome of the appeal (see section 11. of the Reasons), the wording of the claims of the fifth auxiliary request does not play any role.

Reasons for the Decision

- 1. Oral proceedings in the appellant's absence

As announced in advance, the duly summoned appellant did not attend the oral proceedings. Within the meaning of Rule 71(2) EPC 1973, the proceedings could however continue without the appellant. In accordance with Article 15(3) RPBA, the board relied for its decision only on the appellant's written submissions. The board was in a position to decide at the conclusion of the oral proceedings, since the case was ready for decision

(Article 15(5) and (6) RPBA), and the voluntary absence of the appellant was not a reason for delaying a decision (Article 15(3) RPBA).

2. The application pertains to conversion from parallel to serial data.

The problem addressed is how to use a multi-phased clock with an odd number of phases, such clocks being easier to make.

The solution suggests splitting data words comprising an even number of data bits into two halves, each half comprising the same odd number of bits and using a clock with the same odd number of phases.

3. Prior art

Document D1 discloses techniques for serial to parallel and parallel to serial conversions based on clock signals.

Main request

4. Amendments

Present claim 1, relating to a method, is based on a combination of a subset of features from original independent claims 1, 5 and 7 and dependent claims 6 and 8. In particular, only claim 6 refers to a second and third latch which receive a subset of data without specifying that the subset has to comprise an odd number of elements. Further, original claim 7 discloses a multiplexor and specifies at the same time that the second latch has an odd number of data inputs. Consequently, the original claims do not provide any basis for the presently claimed combination of features.

The original description specifies one embodiment only which consistently refers to a data word having ten bits, a clock generator providing five clocks, a second and third latch receiving five bits each, and a multiplexor and converter dealing with five bits. Hence, the description does not provide any basis for the much broader subject-matter claimed. For example, a data word having eight bits, a second latch having three bits and a third latch having five bits as well as a second and a third latch having four bits each, fall under the scope of protection sought, without any basis therefor in the original application documents.

Consequently, claim 1 as amended does not meet the requirements of Article 123(2) EPC.

5. Support by the description

The independent claims are not supported by the description over the whole scope for which protection is sought. The description teaches only one way of solving the problem posed, i.e. how to use clocks having an odd number of phases for converting an even number of bits to serial representation. According to the description, the even number of bits are split into two equally sized parts and the odd number of phases is the same as the odd number of bits in each part; the only example given is based on five phases.

The examples given in section 4. above illustrate a number of cases for which the description does not provide any support.

The requirements of Article 84 EPC are hence not complied with.

First auxiliary request

6. This request corresponds to auxiliary request 3 as refused, which was not admitted by the examining division into the proceedings pursuant to Rule 137(3) EPC. In the view of the board, the examining division exercised its discretion in a proper way and the appellant did not argue otherwise. Based on Article 12(4) RPBA, the first auxiliary request is not admitted in the appeal proceedings.

Second auxiliary request

7. The teaching of the independent claims cannot be derived from the original application documents. In particular, the claims cover embodiments in which the odd number of bits in the second and third latch is not the same as the odd number of multi-phased clocks, for which there is no basis in the original application documents.

Hence, the requirements of Article 123(2) EPC are not complied with.

Third auxiliary request

8. The board holds that the subject-matter of the independent claims cannot be derived from the original application documents, in view of the consistent reference to ten and five bits in the description. Furthermore, the claims encompass an embodiment with a data word having two bits and the second and third latch having one bit each, which is technically incompatible with the teaching of the description.

Hence, the independent claims do not meet the requirements of Article 123(2) EPC.

Fourth auxiliary request

9. The claims of this request comply with the requirements of Articles 84 and 123(2) EPC.

10. Patentability

Document D1 discloses techniques for parallel to serial conversion and forms a suitable starting point for inventive-step analysis.

10.1 This prior-art document discloses, albeit implicitly, a first latch having six bits, as a source for the conversion (column 4, lines 64-66). Moreover, three multi-phased clocks are disclosed, in view of the passage cited above and claim 4, lines 29-32. The flip-flops FF10 and FF30 (Figure 11) and a further flip-flop, as mentioned in column 4, lines 64-66 and claim 4, anticipate a second latch having three bits. Similarly, flip-flops FF20 and FF40 (Figure 11) and a further flip-flop anticipate the third latch. Furthermore, the plurality of transfer gates TG_n (Figure 11, column 4, lines 47-63) corresponds to the multiplexor as claimed, and the flip-flops referred to above convert the parallel signal to a serial signal, while the transfer gates TG51 and TG52 switch between the outputs of two groups of flip-flops.

10.2 Consequently, document D1 discloses all the features of the subject-matter of claim 1 except that ten and five bits are considered.

10.3 The board holds that the skilled person would not have any difficulties in modifying the teaching of document D1, when a need for converting more than six bits arises. Indeed, document D1 already discloses cases with four and six bits.

10.4 Hence, the subject-matter of claim 1 does not involve any inventive step having regard to the disclosure of document D1.

11. In view of the arguments regarding Article 123(2) EPC presented in sections 4., 7. and 8. above that do not object to the term "plurality of multi-phased clocks", there is no need to deal separately with **auxiliary request 5**, which was only submitted conditionally in the event that this term were objected to.

12. Alleged substantial procedural violations

The appellant submitted that two substantial procedural violations had taken place.

12.1 First, the appellant objected that the examining division did not provide minutes of the oral proceedings which took place without the applicant attending.

The board agrees that the Implementing Regulations, in particular Rule 76 EPC 1973, require minutes to be drawn up and the parties to be provided with a copy thereof. The official file of the application does not include any minutes, while the decision under appeal clearly states that it had been taken at the oral proceedings dated 29 September 2015.

However, the board doubts whether not drawing up the minutes forms a procedural violation at all within the meaning of Rule 67 EPC 1973. Even if one were to answer this question in the positive, in this particular case it would not have to be seen as a substantial procedural violation. In view of the content of the minutes as prescribed in Rule 76(1) EPC 1973, they shall contain "the essentials of the oral proceedings, ... the relevant statements made by the

parties, the testimony of the parties, witnesses or experts and the result of any inspection". In the present case, the oral proceedings took place without the applicant attending. In the appealed decision's section summarising the facts and submissions, the requests made in writing, and the letter of the applicant informing the examining division that nobody would attend oral proceedings on behalf of the applicant and that the requests for oral proceedings were withdrawn were referred to in sections 8, 10, 11 and 12 of the decision. As the applicant did not attend the oral proceedings, no further relevant statements were made. All the elements that should form the content of the minutes pursuant to Rule 76(1) EPC 1973 are available in the decision. Thus, the board holds that, in the present case, omission of the minutes did not impact the overall examination proceedings in any substantial manner.

- 12.2 Second, the appellant submitted that it had been taken by surprise by the objection of the examining division based on Article 123(2) EPC with regard to amendments allegedly "made years earlier and never previously objected to", which "constituted a clear violation of Article 113 EPC".

The board notes that the wording of claim 5 of the second auxiliary request as refused is not the same as the wording of claim 5 submitted on 16 April 2012. In particular, the feature "a multiplexor having a first set of inputs coupled to the data outputs of the second and third latch, and a plurality of outputs that provide [sic] only one of the first subset of data and second subset of data at a time" was only added to claim 5 after the summons to oral proceedings had been issued. This feature is not based on the original

claims. Hence, any examination of the claimed combination of features with regard to the requirements of Article 123(2) EPC has, of necessity, to take the description, in particular the embodiments and examples disclosed therein, into consideration. Differently, claim 5 as submitted on 16 April 2012 evidently corresponds to a combination of two originally filed claims.

Consequently, the board takes the view that the examining division was not able to examine at an earlier point in time the compliance with Article 123(2) EPC of the combination of the following features in claim 5:

"a second latch (502) to receive a first subset of data from the even number of data outputs of the first latch;

a third latch (503) to receive a second subset of data from the even number of data outputs of the first latch, wherein the first and second subset include all of the even number of data outputs from the first latch;"

and

"a multiplexor having a first set of inputs coupled to the data outputs of the second and third latch, and a plurality of outputs that provide [sic] only one of the first subset of data and second subset of data at a time".

Furthermore, as observed by the appellant as well, it can fully expect that amendments offered in response to the summons will be scrutinised by the examining division with regard to the provisions of the EPC, in particular with regard to Article 123(2) EPC.

Although the examining division should have properly explained why the example given in the description was of relevance for the features regarding the second and third latch, which stem from an original claim, this deficiency of substantive line of argument does not amount to a (substantial) procedural violation.

12.3 In view of the above arguments, the request for reimbursement of the appeal fee is not allowed, irrespective of the fact that the negative outcome of the appeal alone would not have allowed the reimbursement of the appeal fee either.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chair:



B. ter Heijden

A. Ritzka

Decision electronically authenticated