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**Datasheet for the decision
of 18 June 2021**

Case Number: T 0780/18 - 3.5.02
Application Number: 07075681.2
Publication Number: 1892822
IPC: H02M5/458, H02M7/493,
H02M1/088, H03K17/0812,
H03K17/12, H03K17/687
Language of the proceedings: EN

Title of invention:

Power level balance of frequency converters connected in parallel

Applicant:

Vacon Oy

Relevant legal provisions:

EPC Art. 111(1)
EPC R. 111(2), 103(1)(a)

Keyword:

Appeal decision - remittal to the department of first instance (yes)
Appealed decision - sufficiently reasoned (no) - substantial procedural violation (yes)
Reimbursement of appeal fee - (yes)



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Case Number: T 0780/18 - 3.5.02

D E C I S I O N
of Technical Board of Appeal 3.5.02
of 18 June 2021

Appellant: Vacon Oy
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Decision under appeal: **Decision of the Examining Division of the
European Patent Office posted on 11 October 2017
refusing European patent application No.
07075681.2 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman R. Lord
Members: H. Bronold
W. Ungler

Summary of Facts and Submissions

- I. The appeal of the patent applicant lies from the decision of the examining division to refuse European patent application No. 07 075 681.2.
- II. The appellant initially requested that the contested decision be set aside and that a patent be granted on the basis of the claims as filed with the statement setting out the grounds of appeal. Further, the appellant requested the conduct of oral proceedings.
- III. In a communication under Article 17(1) RPBA the board informed the appellant of its preliminary opinion that the case should be remitted to the examining division *ex officio* because of substantial procedural violations which occurred in the first-instance proceedings. The board also suggested that a corresponding decision could be taken without holding oral proceedings.
- IV. With letter dated 15 March 2021, the appellant agreed with the board's intention to remit the case and withdrew their request for oral proceedings. The appellant requested that the decision under appeal be set aside and that the appeal fee be reimbursed. The appellant filed no arguments with respect to the procedural violations but requested that the proceedings be continued in writing and that the board decide in accordance with point 4 of its communication under Article 17(1) RPBA.

Reasons for the Decision

1. Admissibility of the appeal

The appeal was filed in due time and form and sufficiently substantiated. Thus, the appeal is admissible.

2. Insufficient reasoning - Rule 111(2) EPC

2.1 The contested decision is a decision according to the state of the file. According to the decision, in the communications dated 19 August 2010, 10 April 2012 and 7 April 2017, the applicant was informed that the application did not meet the requirements of the EPC. Allegedly, the applicant was informed of the reasons therein.

Further, the decision states that the appellant filed no comments or amendments in reply to the latest communication but requested a decision according to the state of the file by a letter received on 2 October 2017.

According to minutes of a consultation by telephone of the first examiner with the appellant dated 29 September 2017, the appellant's representative was informed that the "*set of claims filed in preparation of the oral proceedings scheduled for 9-10-2017 is not allowable as claim 1 is not inventive according to Art. 56 EPC*".

2.2 Firstly, the board notes that the findings in the contested decision are obviously not correct.

In fact, the appellant had filed amended claims, an amended description and 5 pages of arguments in support of the amended requests, these documents having been filed on 7 September 2017, i.e. after the last of the communications mentioned in the decision (i.e. that dated 7 April 2017). Whether it is these claims that are referred to in the minutes of the telephone conversation is however not clear from the file.

Further, these minutes do not contain any reasoning why claim 1 is allegedly not inventive. It merely comprises the allegation that claim 1 is not inventive.

Already for this reason, the contested decision has to be set aside since it does not comply with Rule 111(2) EPC.

2.3 Secondly, also with respect to the content of the reasoning as set out in the communications referred to in the contested decision, it is not possible to uphold the decision because none of the communications mentioned in the contested decision contains a reasoning for lack of inventive step.

2.3.1 The first "communication" mentioned in the contested decision is dated 19 August 2010 and represents a European Search Opinion which cannot be a communication of the examining division because it is issued before the start of the examination procedure. It merely provides a first guide regarding the allowability of the then pending claims in view of the results of the European search.

It consists *inter alia* of the following statement:

"2 The present application does not meet the requirements of Article 52(1) EPC because the subject-matter of claims 1-4 is not new within the meaning of Article 54(1) and (2) EPC.

2.1 Each of documents D1, D2, D3, D4, D5 or D6 discloses the subject-matter of claims 1-4.

2.2 For the relevant passages see the references in the search report.

3 It is not apparent which part of the application could serve as a basis for a new, allowable claim."

Even if the European Search Opinion dated 19 August 2010 were a valid communication, the board has strong doubts whether it is sufficiently reasoned. Moreover, it does not even mention inventive step.

- 2.3.2 The communication dated 10 April 2012 also merely contains an objection of lack of novelty over document D1 and D2 of claims 1 and 3 as filed with letter dated 21 March 2011. The novelty analysis relating to D2 is nothing more than two text passages of D2 in brackets without any analysis which features of claim 1 correspond to which passage of D2.
- 2.3.3 The last-mentioned communication dated 07 April 2017 contains a passage on page 3, paragraph 3.3 dealing with inventive step. This passage however cannot be considered to form part of the decision as it is headed "*Additional remark*" and it is further a purely hypothetical reasoning added for the case that the appellant would file a new set of claims "*where **no***

rising edge would be changed in contrast to D1". Thus, paragraph 3.3 was not intended to have any bearing on the claims taken into account by the examining division.

However, the board is not in a position to understand this additional remark in paragraph 3.3 because *de facto* the claims pending (filed with letter dated 7 August 2012) when the communication dated 7 April 2017 was issued already included a corresponding limitation which reads "the rising edges of the control pulses of the parallel connected semiconductor switches are simultaneous".

- 2.3.4 The examining division's reasoning does not mention this feature with respect to novelty or inventive step at all. Instead, claim 1 pending on 7 April 2017 was found to lack novelty based on the following reasoning on page 2:

*"3.1 D1 discloses PWM controlled parallel connected converters, where corresponding switches are controlled with pulses of slightly different length, thereby delaying the falling edge of **at least one of the** switches (p.3, l. 37-40: Wenn der Istwert des Stroms I11 grösser ist als der Sollwert werden die Einschaltflanken von T11 und die **Ausschaltflanke von T14 jeweils verzögert**. Die Ausschaltflanke von T11 und die **Einschaltflanke von T14 bleiben unverzögert**.) edges of one switch compared to the other switch. Necessary "safety times" are regarded, (p.3, l.12, 13: unterschiedliche Randbedingungen ..) as necessary dead times have to be considered in any converter design.*

3.2 Thus, claim 1 is not novel over D1."

As is directly apparent from the above citation, the feature of claim 1 as pending on 7 April 2017 that *"the rising edges of the control pulses of the parallel connected semiconductor switches are simultaneous"* is not covered by the examining division's reasoning of lack of novelty, although it is stated on page 1 that the communication is based on claims 1 and 3 as filed on 7 August 2012.

Independent of the question whether the above-mentioned feature was ignored or the claim version pending on that date was not taken into account by accident, the examining division's reasoning is also beside the case because obviously not all features of claim 1 as pending at the time when the communication dated 7 April 2017 was issued, are dealt with.

2.4 Further, the feature of claim 1 lacking in the reasoning of lack of novelty was found to lack clarity in paragraph 2.5 on page 2 of the communication dated 7 April 2017, which reads:

"2.5 The term "the control pulses ..of the parallel connected switches are simultaneous" is not clear. The intended switches are not connected in parallel, it is the converters which are connected in parallel. Better would be something like "respective switches". The control pulses can not "be simultaneous", however they could be "provided simultaneously"."

2.5 While the board could not identify any original disclosure for the wording proposed by the examining division as a replacement of the claimed features, the reasoning is also not pertinent.

Firstly, a parallel connection of inverters effectively results in a parallel connection of the respective switches of the converters. Secondly, whether the control pulses are simultaneous or provided simultaneously is not to the point because the feature deals with the "rising edges" of said control pulses. Whether a rising edge of a control pulse can be "provided" is questionable for similar reasons to those for the formulation objected to by the examining division. Moreover, there is no clear basis in the original specification for this suggestion such that new issues under Article 123(2) EPC could arise. The board therefore sees no justification to ask for a correction of the wording of claim 1 with an alternative formulation that in itself creates clarity problems and further raises new questions with respect to the original disclosure.

Secondly, regarding the remaining clarity objections with respect to the expressions "in which the falling edge is delayed" and "safety time" the board notes that these were already part of the previous claim version such that it is not plausible that only with the claims filed on 7 August 2012 a lack of clarity could have arisen whereas in the previous communications the expressions seem to have been considered to be clear enough to conclude that the subject-matter of claim 1 was not novel. To the contrary, with respect to "safety time", the examining division had even argued that *"dead times" ... need always to be considered not to destroy the elements.* in its previous communication dated 10 April 2012 in point 2.2.1.

The examining division's conclusion also ignores the full wording of the feature "safety time" which is objected to. The feature does not define that any kind

of safety time is respected, it defines that the falling edge of the control pulses is delayed, such that the delay is within a safety time.

Consequently, the board considers also the examining division's clarity objections not to be justified.

- 2.6 Moreover, from the telephone note dated 4 October 2017, it is not apparent on which claim version the examining division's conclusion is based because the features added to the claims filed on 7 September 2017 are nowhere mentioned in the whole file.

Independently of the question whether the last set of claims dated 7 September 2017 was discussed in the telephone conversation, in the whole file there is no written record of why the examining division concludes that claim 1 lacks an inventive step and on which documents this conclusion is based.

- 2.7 Therefore, the board concludes that, contrary to the statement in the contested decision, the applicant was *de facto* not informed why the application does not meet the requirements of the EPC, contrary to the requirements of Rule 111(2) EPC.

- 2.8 The statement in the contested decision that "The applicant filed no comments or amendments in reply to the latest communication but requested a decision according to the state of the file by a letter received in due time on 02.10.2017 ." is simply not true, because after the last mentioned communication dated 7 April 2017, the appellant had filed 5 pages of arguments, amended claims and amended description pages, which are not reflected in the examining division's reasoning at all.

3. Conclusion

The board has therefore arrived at the conclusion that the deficiencies in the contested decision constitute substantial procedural violations which justify the remittal of the case to the department of first instance and the reimbursement of the appeal fee.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the examining division for further prosecution.
3. The appeal fee is reimbursed.

The Registrar:

The Chairman:



U. Bultmann

R. Lord

Decision electronically authenticated