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**Datasheet for the decision
of 7 May 2021**

Case Number: T 1147/19 - 3.2.01

Application Number: 07748051.5

Publication Number: 2148800

IPC: B60W30/14, B60W10/02,
B60W10/06, B60K31/00, B60W30/18

Language of the proceedings: EN

Title of invention:

METHOD FOR INCREASING ACTIVE DURATION TIME OF AN AUTOMATIC
FREEWHEELING FUNCTION IN A VEHICLE

Patent Proprietor:

Volvo Lastvagnar AB

Opponent:

Scania CV AB

Headword:

Relevant legal provisions:

EPC Art. 83, 84, 123(2), 123(3)

Keyword:

Sufficiency of disclosure - (yes) - relationship between Article 83 and Article 84

Claims - lack of clarity no ground for opposition - clarity after amendment (yes)

Amendments - allowable (yes) - broadening of claim (no)

Decisions cited:

G 0003/14

Catchword:



Beschwerdekammern

Boards of Appeal

Chambres de recours

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Case Number: T 1147/19 - 3.2.01

D E C I S I O N
of Technical Board of Appeal 3.2.01
of 7 May 2021

Appellant: Volvo Lastvagnar AB
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Decision under appeal: **Decision of the Opposition Division of the
European Patent Office posted on 14 February
2019 revoking European patent No. 2148800
pursuant to Article 101(3) (b) EPC.**

Composition of the Board:

Chairman G. Pricolo
Members: M. Geisenhofer
S. Fernández de Córdoba

Summary of Facts and Submissions

- I. The appeal was filed by the patent proprietor (appellant) against the decision of the opposition division to revoke the patent in suit.
- II. During the opposition proceedings, the opponent raised grounds for opposition under Article 100(a) EPC (lack of novelty and lack of inventive step), 100(b) EPC and 100(c) EPC.

The opposition division decided that

- the amendments made to the claims according to the main request filed on 31 January 2018 did not introduce subject-matter extending beyond the content of the application as filed (Article 123(2) EPC) and did not introduce a lack of clarity (Article 84 EPC);
- the patent however did not disclose the invention in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art (Article 83 EPC).

- III. Oral proceedings were held before the Board.

(a) The appellant (patent proprietor) requested that the decision under appeal be set aside and the patent be maintained in amended form, based on either the main request or one of the auxiliary requests 1 to 5 filed with the statement of grounds of appeal.

(b) The respondent (opponent) requested that the appeal be dismissed.

- IV. Independent claim 1 according to the main request reads as follows:

"Method for increasing active duration time of an automatic freewheeling function in a vehicle with cruise control and during a cruise control active period, said function comprising means for determining a first vehicle set speed (v_{set} speed) for when said function is allowed to be activated under at least prevailing conditions, said first vehicle set speed (v_{set} speed) being the set speed of the cruise control, comprising the steps of:

- calculating a predetermined allowable vehicle speed drop (d) to a first underspeed value ($v_{underspeed}$) below said first vehicle set speed (v_{set} speed) for at least prevailing conditions and;*
- controlling said function based on said under speed value, in order to extend active duration time of said function, and characterized in that the magnitude of said vehicle under speed value ($v_{underspeed}$) will not be lower than that a highest gear of a transmission in the vehicle, or a gear engaged just before the freewheel function was activated, will be possible to reengage when the vehicle speed reaches said vehicle under speed value ($v_{underspeed}$) and the freewheel function will be inactivated and a gear will have to be engaged."*

V. The appellant's arguments can be summarised as follows:

- (a) The Opposition Division erred in confusing the requirements of Article 83 EPC with those of Article 84 EPC. Since the objected terms were already present in the granted claims, clarity was not at stake following decision G3/14 of the Enlarged Board of Appeal.
- (b) The term "set speed of the cruise control" was neither ambiguous nor did it render the claim equivocal.

- (c) The introduction of the feature "said first vehicle set speed $v_{set\ speed}$ being the set speed of the cruise control" did not provide the skilled person with any new technical information beyond that disclosed in the application as filed.
- (d) The omission of the term "where" in the characterizing portion of claim 1 did not result in an extension of the scope of protection as compared to claim 1 as granted. Clearly the presence of the word "where" in granted claim 1 was a linguistic error.

VI. The respondent's arguments can be summarised as follows:

- (a) The patent did not provide sufficient information for the skilled person to carry out the invention (Article 83 EPC).

There was no teaching on how to calculate an "allowable vehicle speed drop (d) to a first under speed value ($v_{underspeed}$)". According to a possible interpretation of claim 1, the latter solely defined that irrespective of how the vehicle under speed $v_{underspeed}$ was calculated, $v_{underspeed}$ should have a magnitude allowing the particular gear to re-engage when the vehicle reached $v_{underspeed}$. But still, the claim explicitly required to calculate said magnitude and therefore the skilled person needed information about a mathematical relationship allowing a calculation.

Furthermore, the patent did not define which vehicle speed would hinder the re-engagement of the gear or the engagement of the highest gear. In this context, the claim did not require the vehicle to be able to accelerate with this engaged gear but the transmission

could further shift gears after reengagement of the highest gear.

Also, it was an undue burden for the skilled person to identify any suitable "prevailing conditions" under which the freewheel function was allowed to be activated by $v_{set\ speed}$ and for which $v_{underspeed}$ was calculated.

Further, the skilled person was not provided with sufficient information to implement the teaching of claim 1 such that an increased or extended active duration time of an automatic freewheeling function was achieved.

- (b) It was not clear (Article 84 EPC) what the term "the set speed of the cruise control" meant. The patent used the expressions of speeds being "set" for the cruise control in so many different aspects that the term "the set speed of the cruise control" in the context of the opposed patent could not be presumed to have the ordinary meaning of the target speed set by the driver for the cruise control.
- (c) Claim 1 of the main request was furthermore unallowably amended (Article 123(2) EPC) since the application as filed did not provide a suitable basis for the feature "said first vehicle set speed $v_{set\ speed}$ being the set speed of the cruise control".
- (d) Furthermore, the scope of protection of claim 1 was extended (Article 123(3) EPC) due to the omission of the word "where" in the characterizing portion.

Reasons for the Decision

Main request

The main request in appeal proceedings is identical to the main request underlying the decision under appeal.

Sufficiency of disclosure (Article 83 EPC)

1. The patent specification provides sufficient information for the skilled person to carry out the invention.
- 1.1 The Board agrees with the respondent that the language in the characterizing portion of claim 1 is inaccurate. The linguistic inaccuracies were already present in claim 1 as granted and are thus not open to objections under Article 84 EPC following decision G 3/14 of the Enlarged Board of Appeal. Hence the wording of the claim needs to be interpreted.
 - 1.1.1 In this respect, the Board agrees with the view taken by the Opposition Division (see point 17.2 of the contested decision) that the characterizing portion of claim 1 requires that the vehicle under speed value will not be lower than a vehicle speed value at which it will no longer be possible to re-engage the highest gear of the transmission or the gear engaged before the activation of the freewheel function.
 - 1.1.2 Further, the Board agrees with the appellant that what the characterizing portion of the claim implies, when read by a skilled person and with a mind willing to understand, is that the same gear before freewheeling must be able to carry on driving the vehicle after freewheeling, meaning that no down change is necessitated.

- 1.1.3 In this respect, the Board also agrees with the appellant that what is meant by the term "inactivated", as appears in the last feature of claim 1, is explained in [0026] of the patent (see particularly column 5, lines 50 to 53), namely that a gear in the transmission is engaged and the propulsion unit is drivingly connected to the driven wheels. Since the cruise control is active, this means that its control unit will strive to accelerate the vehicle to its set speed.

- 1.2 The opposition division considered (see point 17.1 of the contested decision) that the person skilled in the art "is not able to calculate the magnitudes of the vehicle under speed value that are clearly and unambiguously in accordance with claim 1" and that the person skilled in the art "cannot derive from the claims, description or figures specific indications and guidance that allow him to distinguish between magnitudes of the vehicle under speed value that fulfill the condition of claim 1 of the main request, from magnitudes that do not fulfill the condition".
 - 1.2.1 As regards the interpretation of the term "calculating," which implies according to the respondent that a mathematical relationship has to be given, the Board agrees with the appellant that this term does not necessarily imply a mathematical relationship but in the present context simply means that a value is determined.

 - 1.2.2 And indeed the patent indicates what considerations need to be made for such determination. Paragraph [0017] in particular refers to the "determination" of the magnitude of the allowed predetermined vehicle speed drop to said under speed value below said first vehicle speed which "is dependent of the vehicle's possibilities to be able to accelerate up to said first vehicle set speed from said

under speed value within a reasonable predetermined time." Further, paragraph [0017] discloses that a predetermined vehicle speed drop below said first vehicle set speed will not occur if the vehicle is expected to meet increased travel resistance, for example an uphill slope, in the near future. These considerations are sufficient for a skilled person (i. e. an automotive engineer) for determining a suitable under speed value. In fact, the particular numerical values may be determined by experiments or simulations without need of any mathematical relationships.

- 1.2.3 Also, it is not necessary to provide in advance specific under speed values either, since such values would depend inter alia on the vehicle's propulsion power, the vehicle load, and the topography in front of the vehicle.
- 1.2.4 Accordingly, as the invention does not rely upon specific values of the vehicle under speed, the Opposition Division's conclusion that the skilled person would not be able to "distinguish between magnitudes of the vehicle under speed value that fulfill the condition of claim 1 of the main request, from magnitudes that do not fulfill the condition", cannot be shared either. Such conclusion rather relates to an issue of clarity under Article 84 EPC, as pointed out by the appellant, rather than of sufficiency under Article 83 EPC.
- 1.3 As regards the respondent's objection concerning the meaning of "possible to reengage" and that the patent did not define which vehicle speed would hinder the re-engagement of the gear or the engagement of the highest gear, this objection is moot in view of the reading of the characterizing portion of claim 1 as explained above under point 1.1.

1.4 Concerning the term "prevailing conditions" and the respondent's objection in this respect, the Board agrees with the appellant that this term is read by a skilled person as referring to the "current conditions". The "prevailing conditions" must indeed be seen in the context of claim 1 which refers to allowing the activation of an automatic freewheeling function during a cruise control active period "under at least prevailing conditions", i.e. under the conditions at which the vehicle is currently operating under cruise control. In particular, paragraph [0017] of the patent refers to the "prevailing vehicle load" which clearly means the current vehicle load. Further, paragraph [0005], even if referring to the prior art, refers to the freewheel function being automatically activated when a predetermined vehicle condition is prevailing, thus implying that "prevailing" means "existing", i.e. that the predetermined condition is the "current" one.

1.5 Concerning the respondent's objection as regards the feature of increasing or extending active duration time of the automatic freewheeling function, the Board agrees with the appellant that the skilled person understands e.g. from Fig. 1 of the patent that freewheeling is allowed to take place at any speed at or above v_{setspeed} . Thus, in Fig. 1 the active freewheeling function is denoted by curve 1. As is explained in [0026], the freewheeling function is activated and the vehicle is decelerating from a speed higher than v_{setspeed} . Rather than the freewheeling function being deactivated when the vehicle speed drops to v_{setspeed} , as in the prior art, the freewheeling function is allowed to continue until the vehicle speed drops to $v_{\text{underspeed}}$. It is only once this latter speed has been reached that the freewheeling function is deactivated. Accordingly, the active duration time of the automatic freewheeling function is increased, or extended, as compared to the

case in which the freewheeling function is deactivated when the vehicle speed drops to v_{setspeed} .

- 1.6 The Board is hence of the opinion that the patent provides sufficient information for a skilled person to carry out the invention.

Clarity (Article 84 EPC)

2. Claim 1 of the main request corresponds to granted claim 1 apart from the additional feature "said first vehicle set speed ($v_{\text{set speed}}$) being the set speed of the cruise control" and the omission of the term "where" in the characterizing portion.

- 2.1 Following the decision G3/14 of the Enlarged Board of Appeal, the added feature can be examined with regard to the compliance with Article 84 EPC.

- 2.2 The Board fully shares the decision of the opposition division with regard to this objection (cf. point 18.3 of the reasons for the decision). As admitted by the respondent, the ordinary meaning of the term "the set speed of the cruise control" is that of the target speed set by the driver for the cruise control. Considering that the terms of a claim are to be given their normal technical meaning, the added feature does not introduce an unclarity to the claim.

Amendments (Article 123(2) EPC)

3. The respondent further argued that said added feature lacked disclosure in the application as filed.

- 3.1 Even if the application as filed mentions further types of speeds being also set for the cruise control, i.e. "second

vehicle set speed", "vehicle under speed" and "brake cruise set speed", as submitted by the respondent, the Board agrees with the Opposition Division (point 18.2 of the contested decision) that the contested feature is supported by the original application, page 7, lines 10-14, disclosing "a first vehicle set speed $v_{\text{set speed}}$ " and that " $v_{\text{set speed}}$ can also be set speed for said cruise control". As explained above, "the set speed" of the cruise control is that of the target speed set by the driver for the cruise control. Accordingly, this passage discloses that the first vehicle set speed ($v_{\text{set speed}}$) can be the set speed of the cruise control.

- 3.2 The amendment hence does not extend over the disclosure of the application as originally filed and therefore complies with Article 123(2) EPC.

Scope of protection (Article 123(3) EPC)

4. The respondent submitted that the scope of protection conferred by granted claim 1 was extended when omitting the word "where" at the beginning of the characterizing portion.
- 4.1 In the respondent's view, the term "where" in "where the magnitude of said vehicle under speed value will not be lower than that a highest gear of a transmission in the vehicle, or a gear engaged just before the freewheel function was activated" effected [sic] that the subsequent feature, namely "[it] will be possible to reengage when the vehicle speed reaches said vehicle under speed value and the freewheel function will be inactivated and a gear will have to be engaged" was a condition. Deleting the term "where" led to the fact that the magnitude of the vehicle under speed value was in general not lower than that of the highest gear of the transmission in the

vehicle or a gear engaged just before the freewheeling function was activated.

- 4.2 As pointed out above (point 1.1), the language in the characterizing portion of claim 1 of the main request is inaccurate and needs to be interpreted. The same applies to the language in the characterizing portion of claim 1 as granted, in which the presence of the term "where", as pointed out by the appellant, is a linguistic error.

Indeed, the expression "characterized in that where" in granted claim is grammatically incorrect.

- 4.3 In any case, the Board does not see why the omission of the term "where" would lead to a different interpretation of the characterizing portion of the claim as granted and of claim 1 of the main request. In both cases, the characterizing portion requires that the vehicle under speed value will not be lower than a vehicle speed value at which it will still be possible to re-engage the highest gear of the transmission or the gear engaged before the activation of the freewheeling function. Hence, in the Board's judgment, the above interpretation of the characterizing portion of claim 1 of the main request (see point 1.1) would not be affected by the presence of the term "where". In other words, the interpretation of the characterizing portion of claim 1 of the main request and of claim 1 as granted is the same.

- 4.4 Accordingly, there is no extension of the scope of protection and the main request hence also complies with the requirements of Article 123(3) EPC.

- 4.5 Under these circumstances the question of admissibility of the objection under Article 123(3) EPC raised by the appellant during the oral proceedings, as this objection

was not raised before in opposition proceedings, can be left aside. It is noted that this objection is in fact related to the interpretation of claim 1, an issue that the Board anyway considered when dealing with sufficiency of disclosure.

Remittal

5. It follows from the above that the main request complies with the requirements of Article 83 EPC contrary to the findings in the contested decision. Furthermore, in accordance with the findings of the Opposition Division, the main request meets the requirements of Articles 84 and 123(2) EPC. Finally, the Board concludes that the main request also meets the requirements of Article 123(3) EPC.

6. Article 11 RPBA 2020 provides that the Board shall not remit a case to the department whose decision was appealed for further prosecution, unless special reasons present themselves for doing so.

Such special reasons are apparent in the present case because the opposition division has not taken an appealable decision on essential outstanding issues with respect to novelty and inventive step.

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 for further prosecution.

The Registrar:

The Chairman:



A. Vottner

G. Pricolo

Decision electronically authenticated