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Datasheet for the decision of 26 February 2026

Case Number: T 1118/24 - 3.2.01

Application Number: 16727221.0

Publication Number: 3261888

IPC: B60T13/26, B60T13/68

Language of the proceedings: EN

Title of invention:
BRAKE VALVE ARRANGEMENT

Patent Proprietor:
KNORR-BREMSE Systeme für Nutzfahrzeuge GmbH

Opponent:
SAF-HOLLAND GmbH

Headword:

Relevant legal provisions:
EPC Art. 54, 123(2)

Keyword:
Novelty - main request (no)
Amendments - extension beyond the content of the application as filed (yes)

Decisions cited:
G 0002/10, T 0437/17

Catchword:

Europäisches Patentamt
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Beschwerdekammern

Boards of Appeal

Chambres de recours

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Case Number: T 1118/24 - 3.2.01

D E C I S I O N
of Technical Board of Appeal 3.2.01
of 26 February 2026

Appellant: (Patent Proprietor)	KNORR-BREMSE Systeme für Nutzfahrzeuge GmbH Moosacher Strasse 80 80809 München (DE)
Representative:	Moore, David Simon Jensen & Son 366-368 Old Street London EC1V 9LT (GB)
Appellant: (Opponent)	SAF-HOLLAND GmbH Hauptstrasse 26 63856 Bessenbach (DE)
Representative:	Müller Schupfner & Partner Patent- und Rechtsanwaltspartnerschaft mbB (Muc) Bavariaring 11 80336 München (DE)
Decision under appeal:	**Interlocutory decision of the Opposition Division of the European Patent Office posted on 1 July 2024 concerning maintenance of the European Patent No. 3261888 in amended form.**

Composition of the Board:

Chairman	P. Guntz
Members:	J. J. de Acha González
	B. Spitzer

Summary of Facts and Submissions

I. The patent proprietor and the opponent have appealed against the Opposition Division's interlocutory decision that the patent, as amended in accordance with auxiliary request 1 filed during the oral proceedings, complies with the requirements of the EPC.

II. Among other things, the Opposition Division decided that the subject-matter of granted claim 1 was not new in view of document **D5** (EP 2 757 010 A1), and that the subject-matter of claim 1 of the auxiliary request 1 did not extend beyond the content of the application as originally filed.

III. Oral proceedings before the Board were held on 26 February 2026.

The appellant (patent proprietor) requested that the decision under appeal be set aside and that the patent be maintained as granted (main request), or, in the alternative, that the opponent's appeal be dismissed (auxiliary request 0), or, further in the alternative, that the patent be maintained in amended form on the basis of one of the auxiliary requests 1 or 2, filed with their reply to the opponent's statement of grounds of appeal.

The appellant (opponent) requested that the decision under appeal be set aside and that the patent be revoked.

IV. Claim 1 of the main request (i.e. as granted) reads as follows (feature numbering according to the contested decision):

M1.1 *A brake valve arrangement for use in a trailer electronic braking system (200) comprising a pressure control module controllable by an electronic control unit,*

M1.2 *having a main supply of pneumatic pressure (102) and a reservoir (208),*

characterized in that

M1.3 *the valve arrangement comprises a park valve (205) having pneumatic connections to the main supply (102), reservoir (208) and pressure control module (200),*

M1.4 *which valve is provided with a first actuator (205) for actuating the raising and lowering of the trailer height and a second actuator (201) for controlling parking and manoeuvring functions.*

Claim 1 of auxiliary request 0, which corresponds to auxiliary request 1 underlying the decision under appeal, reads as follows (differences with respect to granted claim 1 underlined by the Board):

M1.1 *A brake valve arrangement for use in a trailer electronic braking system (200) comprising a pressure control module controllable by an electronic control unit,*

M1.2 *having a main supply of pneumatic pressure (102) and a reservoir (208) and further comprising a CAN bus,*

characterized in that

M1.3 *the valve arrangement comprises a park valve (205) having pneumatic connections to the main supply (102), reservoir (208) and pressure control module (200),*

M1.4 *which valve is provided with a first actuator (205)*

comprising push buttons for actuating the raising and lowering of the trailer height, and is further provided with a levelling control sensor (109) to determine the height of the trailer, the output of which is fed to the pressure control module, the pressure control module (200) then controlling the flow of air into the air bags to raise and lower the trailer in accordance with the user inputs from the push buttons or alternatively in accordance with any instructions received from a remote device via the CAN bus, and a second actuator (201) for controlling parking and manoeuvring functions, wherein the second actuator comprises a button (201) having a first position in which the trailer is parked and a second position in which the trailer is manoeuvrable and with a third position, in which third position the trailer can be driven.

Claim 1 of auxiliary request 1 reads as follows (differences with respect to claim 1 of auxiliary request 0 underlined or struck through by the Board):

M1.1 *A trailer electronic braking system comprising a brake valve arrangement, ~~for use in a~~ the trailer electronic braking system (200) comprising a pressure control module controllable by an electronic control unit for controlling braking pressure to brakes on the trailer, the trailer electronic braking system*

M1.2 *having a main supply of pneumatic pressure (102) and a reservoir (208) the trailer brake system further comprising raise/lower functionality for raising and lowering of the trailer height, parking and manoeuvring functions and further comprising a CAN bus,*

characterized in that

M1.3 *the valve arrangement comprises a park valve (205) having pneumatic connections to the main supply (102), reservoir (208) and pressure control module (200),*

M1.4 *which valve is provided with a first actuator (205) comprising push buttons for actuating the raising and lowering of the trailer height, and is further provided with a levelling control sensor (109) to determine the height of the trailer, the output of which is fed to the pressure control module, the pressure control module (200) then controlling the flow of air into the air bags to raise and lower the trailer in accordance with the user inputs from the push buttons or alternatively in accordance with any instructions received from a remote device via the CAN bus, and a second actuator (201) for controlling parking and manoeuvring functions, wherein the second actuator comprises a button (201) having a first position in which the trailer is parked and a second position in which the trailer is manoeuvrable and with a third position, in which third position the trailer can be driven.*

Claim 1 of auxiliary request 2 reads as follows (differences with respect to claim 1 of auxiliary request 0 underlined by the Board):

M1.1 *A brake valve arrangement for use in a trailer electronic braking system (200) comprising a pressure control module controllable by an electronic control unit,*

M1.2 *having a main supply of pneumatic pressure (102) and a reservoir (208) and further comprising a CAN bus,*

characterized in that

M1.3 *the valve arrangement comprises a park <u>shunt</u> valve*

(205) having pneumatic connections to the main supply (102), reservoir (208) and pressure control module (200),

M1.4 *which park shunt valve is provided with a first actuator (205) comprising push buttons for actuating the raising and lowering of the trailer height, and is further provided with a levelling control sensor (109) to determine the height of the trailer, the output of which is fed to the pressure control module, the pressure control module (200) then controlling the flow of air into the air bags to raise and lower the trailer in accordance with the user inputs from the push buttons or alternatively in accordance with any instructions received from a remote device via the CAN bus, and a second actuator (201) for controlling parking and manoeuvring functions, wherein the second actuator comprises a button (201) having a first position in which the trailer is parked and a second position in which the trailer is manoeuvrable and with a third position, in which third position the trailer can be driven.*

Reasons for the Decision

Appeal of the patent proprietor

1. *Main request - Novelty*

1.1 The subject-matter of granted claim 1 is not novel over the brake valve arrangement of D5.

1.2 The Opposition Division correctly concluded that the embodiment of figures 15 and 16 of D5 discloses the subject-matter of granted claim 1.

1.2.1 The patent proprietor argued that, in figure 16 of D5, the park valve 12 was connected to the pressure control module, but not to the main supply 2 or the reservoir 4. Park valve 12 should not be confused with brake valve arrangement 11. Furthermore, the functionality of raising and lowering was electronically controlled in the embodiment of figure 16 of D5 and was therefore excluded from the subject-matter of claim 1. Claim 1 had to be construed as referring to a purely pneumatic system, including the control of raising and lowering the trailer by the first actuator. This interpretation was derived from the disclosure of the invention in the patent, particularly the fact that it concerned a decoupled - and therefore powerless - trailer, and the fact that the parking and manoeuvring functions were pneumatic-operated only.

1.2.2 Taking into account the patent proprietor's own submissions (see pages 4 and 5 of their Statement of Grounds of Appeal), as well as the patent specification (particularly figures 6 to 8), the Board concludes that the trailer control valve 11 of D5 (also referred to as valve arrangement 5; see, for example, paragraph [0081] of D5) is the same as the claimed park valve, since it incorporates the release and park valves 10 and 12 in a single unit. The Opposition Division came to the same conclusion (see point 15.2.2 of the decision).
It should be noted that the specification of the contested patent uses the terms 'park valve' and 'park valve arrangement' interchangeably when referring to the package comprising the valve element 205 and its associated actuators (see paragraphs [0051] to [0053]),

which is consistent with the disclosure in paragraph [0009] of the patent. Accordingly, while the park valve itself can be interpreted as a single functional unit, its implementation may involve multiple internal valves or components. The claim does not explicitly exclude this, and the broad term 'a park valve' could refer to either a single valve or a module comprising multiple valves, provided that it meets the functional requirements. Thus, the wording of claim 1, when read in light of the description, implies a park valve that may be either a singular entity or a multi-valve assembly, the latter being disclosed in D5: the trailer control valve 11 integrates the park valve 12 and the release valve 10, among others, into one single unit (compare paragraphs [0077] and [0079] of D5, which describe figures 13 and 14; the latter with a design essentially corresponding to that of figure 16 - see paragraph [0081]).

The trailer control valve 11 of D5 has direct pneumatic connections to the main supply 2, the reservoir 4, and the pressure control module 6, 72.

Contrary to the patent proprietor's submissions, claim 1 does not exclude the possibility of the first actuator being electronically controlled. Even if the second actuator in the contested patent is purely pneumatic — as is the case for the actuator for valves 10 and 12, which are responsible for the parking and manoeuvring function in D5 — this does not derive from the patent specification for the first actuator, which is responsible for raising and lowering the trailer. Accordingly, the electronically controlled actuator 119 in D5, which controls the raising and lowering of the trailer height and is integrated into the

electronically controlled control valve 11 of D5, falls under feature 1.4 of claim 1.

2. Therefore, the patent proprietor's appeal is not allowable.

Appeal of the opponent

3. *Auxiliary request 0 - inadmissible extension*

3.1 The subject-matter of claim 1 extends beyond the content of the application as originally filed (Article 123(2) EPC).

3.2 The auxiliary request 0 corresponds to the auxiliary request 1 underlying the decision under appeal, which the Opposition Division found allowable.

Claim 1 is based on claims 1, 2 and 4, as well as page 5, paragraphs 2 and 4 together with figure 2 of the application as originally filed (see the WO A publication of the application; the decision under appeal referenced the corresponding paragraphs [0021] and [0023] of the granted patent, see point 16). The patent proprietor shared this view.

The decision under appeal also referred to paragraph [0016] of the granted patent as a basis for the subject-matter of claim 1. However, paragraph [0016] discloses prior art according to figure 1, not the invention, and consequently cannot serve as a basis for the subject-matter of claim 1.

3.3 Accordingly, the parties, as well as the Opposition Division in its decision, agree that the subject-matter of granted claim 1 is based on the originally filed

claims 1, 2 and 4, incorporating features from the disclosure of the preferred embodiment presented in figure 2, together with the corresponding passages in the description.

Therefore, it must be determined whether all inextricably linked features have been incorporated into the claim or whether the subject-matter of claim 1 generalises the disclosure of this invention's preferred embodiment as originally filed, i.e. whether the subject-matter of claim 1 represents an unallowable intermediate generalisation of that embodiment's disclosure (see Case Law of the Boards of Appeal of the EPO, 11th edition, 2025, II.E.1.9.)

3.4 The patent proprietor merely referred in writing to the conclusions of the Opposition Division set out in points 19.2.3 to 19.2.7 of the decision under appeal, with regard to the objection to the "push buttons" feature taken in isolation from the disclosure of the preferred embodiment, with features disclosed in combination with it omitted. Furthermore, they argued that the features of the park valve being a shunt valve, the inclusion of the charging valve, and the two pneumatic connections to the pressure control module and the two additional pneumatic connections - one to a main air brake reservoir and another to a second reservoir - of the park valve were not essential for the invention to function properly and were incidental. Therefore, these features could be omitted without contravening Article 123(2) EPC.

3.5 The push buttons on page 5, paragraph 2 of the originally filed application belong to park valve 205. The Opposition Division cited paragraphs 2 and 3 on page 11, together with figures 7 and 8 of the

originally filed application, to justify the addition of the push buttons of the figure 2 embodiment in isolation (see point 19.2.5 of the contested decision). However, these paragraphs refer to the pneumatic valve element 205 of the invention described earlier in the description, i.e. according to figure 2. As the opponent pointed out, paragraph 2 on page 5 discloses that the park/shunt valve includes a charging valve. With reference to the pressure control module and the additional reservoir, it is stated that the park valve has two pneumatic connections to the pressure control module and two additional pneumatic connections: one to a main air brake reservoir and another to a second reservoir (referred to as air brake reservoir 206; see point IV.2 of the opponent's statement of grounds of appeal). These features have been omitted and are disclosed in combination, in a functional and structural relationship, in the preferred embodiment of the park valve shown in figure 2. This is also explicitly pointed out in paragraphs 2 and 3 on page 5 of the application as originally filed.

The Board also notes that, according to established case law of the Boards of Appeal, the criterion for assessing compliance with the requirements of Article 123(2) EPC is the "gold standard", i.e. whether the claimed subject-matter is directly and unambiguously derivable by the skilled person from the application as originally filed (see e.g. points 4.3 and 4.6 in the Decision of the Enlarged Board of Appeal G 2/10, OJ EPO 2012, 376), rather than whether the omitted features are explained as being essential (see e.g. T 0437/17, point 3.3.5). Features may only be singled out where it is evident that they are not inextricably linked to other non-optional features in the context of the disclosure. Due to the both structural and functional

relationship referred to above, this exception is not given in the case at hand.

3.6 Consequently, an unallowable intermediate generalisation is present.

3.7 Therefore, the outstanding objections raised by the opponent under Rule 80 and Article 84 EPC, as well as the request for remittal of the case to the Opposition Division for reasons of a substantial procedural violation, can remain unanswered.

4. As the subject-matter of claim 1 of auxiliary requests 1 and 2 also includes the additional feature of push buttons taken from the disclosure of the preferred embodiment of figure 2 and does not include the aforementioned features, the same reasons presented above for claim 1 of auxiliary request 0 apply. Therefore, the subject-matter of claim 1 of auxiliary requests 1 and 2 extends beyond the content of the application as originally filed (Article 123(2) EPC).

4.1 The question of the admissibility of the auxiliary requests 1 and 2 in the appeal proceedings can therefore be left open.

5. It follows that the appeal of the opponent is allowable.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The patent is revoked.

The Registrar: The Chairman:

D. Grundner P. Guntz

Decision electronically authenticated