Datasheet for the decision of 16 February 2011

Case Number: T 0904/09 - 3.2.02
Application Number: 02762195.2
Publication Number: 1427372
IPC: A61G 5/14
Language of the proceedings: EN
Title of invention:
Raising Wheelchair
Patentee: Levo AG Wohlen
Opponent: INVACARE INTERNATIONAL S.A.R.L.
Headword:

Relevant legal provisions:
EPC Art. 100(b), 56
RPBA Art. 12(2)(4), 13(1)

Relevant legal provisions (EPC 1973):

Keyword:
"Sufficient disclosure (yes)"
"Inventive step (yes)"
"Late filed documents (partially admitted)"

Decisions cited:
T 0226/85, T 0713/98, T 0536/88

Catchword:
Case Number: T 0904/09 - 3.2.02

DECISION
of the Technical Board of Appeal 3.2.02
of 16 February 2011

Appellant: INVACARE INTERNATIONAL S.A.R.L.
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Decision under appeal: Decision of the Opposition Division of the European Patent Office posted 18 February 2009 rejecting the opposition filed against European patent No. 1427372 pursuant to Article 101(2) EPC.

Composition of the Board:
Chairman: M. Noël
Members: D. Valle
A. Pignatelli
Summary of Facts and Submissions

I. The opponent (appellant) lodged an appeal on 17 April 2009 against the decision of the Opposition Division posted on 18 February 2009 to reject the opposition. The fee for the appeal was paid on 17 April 2009 and a statement setting out the grounds for appeal was received on 26 June 2009.

II. The conclusion of the first instance was that the requirements of Articles 100(b) and 100(a) EPC were met, i.e. the invention was sufficiently disclosed in the patent for it to be carried out and the claimed subject-matter was patentable under Articles 52 to 57 EPC.

III. Oral proceedings were held on 16 February 2011.

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

The respondent (patentee) requested that the appeal be dismissed or that the patent be maintained in amended form with any of the sets of claims filed as auxiliary requests 1 and 2 on 15 February 2011.

IV. The following documents are relevant for the present decision:

D3a: FR-A-1 594 804
D5: WO-A1-82/01314
V. Claim 1 of the main request reads as follows:

"A raising wheelchair comprising a wheelframe and a raising frame (21), said raising frame (21) being connected to the frontal portion of the wheel frame (11) and comprising a seat support (18) with a seat (17), a seat back support (19) and a backrest (20), and on each side of the raising frame (21) a lever parallelogram (34) for maintaining the backrest (20) vertical in the sitting position as well as in the standing position of the user, a lever (47) between said lever parallelogram (34) and said backrest (20) for moving, both on a change from the standing position or a change from the lying position to a sitting position, or vice versa, the backrest (20) away from the rear end of the seat support (18), or toward the rear end of the seat support (18), respectively, said seat back support (19) comprising on each side a column (41) and telescopically movable thereon a tube section (45), to which said backrest (20) is connected, said lever parallelogram (34) comprising a seat support bar (42) and substantially parallel thereto a
parallelogram lever (35), both being pivotally connected with one end to the front of the wheel frame (11) and with the other end to the lever arm (31) comprised in said seat back support (19), characterized in that said lever (47) is pivotally connected at one end to the rear portion of the seat support (18) and at the other end to the tube section (45)."

VI. The appellant argued essentially as follows.

The invention was not disclosed in a manner sufficiently clear and concise for it to be carried out by a person skilled in the art. In claim 1 there was claimed a lever 47 between the lever parallelogram 34 and the backrest 20 for moving, both on a change from the standing position and a change from the lying position to a sitting position, or vice versa, the backrest away from the rear end of the seat support 18, or toward the rear end of the seat support, respectively. However, the patent in suit did not disclose how said lever 47 could perform such function so that the problem set in the patent was not solved by the features of claim 1. In the only embodiment of the invention presented with reference to Figures 4 to 6, the rigid lever was pivotally connected at one end with the backrest 20 through the seat back support 19, and at the other end with the rear end of the seat support 18, respectively. That meant that the distance between the backrest (20) and the rear end of the seat support (18) remained unchanged, contrary to what was required by the wording of the claimed subject-matter. The skilled person, therefore, could not obtain from the patent disclosure sufficient information in order to perform the invention.
The documents D12 and D13 were filed with letter dated 21 May 2010. They should be introduced into the appeal proceedings because they were highly relevant. Also the line of argument based on documents D5 and D7 was submitted as a direct reaction to the previous response of the respondent, dated 17 January 2011. D5 and D7 were not filed late since these documents were already cited in the patent specification and, therefore, formed part of the proceedings. In this respect the appellant referred to decision T 536/88.

The subject-matter of claim 1 of the main request did not involve an inventive step having regard to a combination of the teaching of document D2 or D1 with that of D3, D7 or D8. Starting from D2 as closest prior art the subject-matter of claim 1 in suit differed therefrom by a rigid lever 47 and telescopic tubes placed on each side of the raising frame. Since, however, the rigid lever was not able to solve the problem of avoiding the shirt-pulling effect, said lever was not to be considered when assessing inventive step. The only difference in claim 1, therefore, resided in a column 41 telescopically movable on a tube section 45.

D3 disclosed the features of claim 1 which were missing in D2, considering that the gliding system 12/40 shown in Figure 3 of D3 was kinematically equivalent to the telescopic arrangement 45/41 proposed in the patent in suit, and that the position of the pivot 26 of the lever 24 on the bracket 22 could vary, as recited in D3(a) (see Figures 2 and 3, page 3, last paragraph. Because the seat back 28 in D3 was slidably mounted on
a support 12 placed at the rear of the seat back, the problem solved by the present patent would be to permit positioning of the backrest between the telescopic tubes, so as to provide backrests of different types. Since claim 1 at issue was silent about this feature, this problem was not solved either. It resulted that the subject-matter of claim 1 did not involve an inventive step.

Also the drawing on page 14 of document E15, which was a relevant exploded illustration of the prior use generally identified as document D8, showed an angled bracket corresponding to the lever 47 of the invention, and a guided backrest shell having parts corresponding to the tube sections of the invention. A similar telescopic arrangement was to be found in D7. The wheelchairs disclosed in D8 or D7 were not provided with a lever parallelogram, but this was of no consequence since a parallelogram was already disclosed in D2.

Starting from D1 the wheelchair differed from claim 1 in that the unique lever 198 was not connected to the seat support and not directly to the backrest but through a cross bar 210 mounted on the back frame. However the exact positioning of these connections was not determinative since it could be varied, as specified in claim 2, and represented a simple constructional measure within the competence of the skilled person. The use of two levers connected on each side of the raising frame was only the result of a duplication of the same means, and a backrest slidably mounted on its back support by means of tube sections telescopically movable on columns, or equivalent means,
The invention as claimed was sufficiently disclosed in the patent specification for it to be carried out. It was evident from the embodiment described and shown in the figures how the backrest as a whole could be moved away from and toward the rear end of the seat support. The distance set out by the appellant was not the subject of claim 1. Instead, the movement resulting from a change of position was claimed. The objections raised by the appellant were not based on Article 100(b) EPC but on Article 84 EPC, which was not objectionable in opposition.

D12 and D13 should not be introduced into the proceedings because late filed and not more relevant than the documents on file. The line of argument based on D5 and D7 should not be considered either because it was submitted belatedly and unjustifiably. In particular D5 did not come closer to claim 1 than prior art documents D2 or D1.

The invention recited in claim 1 of the main request was not made obvious by any of the combinations of documents set forth by the appellant, starting from either D1 or D2. In all events the skilled person would not arrive at the structural combination of all features as claimed.
Reasons for the Decision

1. The appeal is admissible.

2. Sufficiency of disclosure - Article 100(b) EPC

Claim 1 of the main request corresponds to the version as granted and is not objectionable under Article 84 EPC since lack of clarity is not a ground for opposition as long as the claimed subject-matter has not been amended. However, possible ambiguities, contradictions and lack of clarity of any kind in the application or the patent as a whole may have consequences for the assessment of Articles 100(b) and 100(a) in conjunction with 56 EPC (see in particular T 226/85, point 4 or T 713/98, point 3). With these considerations in mind, the wording of claim 1 requires some interpretation since the result to be achieved was contested by the appellant.

With respect to the state of the art represented in Figures 1 and 2 of the patent, the wheelchair according to the invention shown in Figures 3 to 6 comprises, in addition, on each side of the raising frame a lever 47 pivotally connected between the seat support 18 and the seat back support 19, this latter being itself slidably connected to the seat assembly by means of a telescopic arrangement comprising a tube section 45 connected to the backrest 20 and a column 41 connected to the seat back support 19. Moreover, the seat support 18 is connected to a seat support bar 42 (Figure 4) having an adjustable, predetermined length.
Since the seat support bar 42 (which is part of the seat 17) and the column 41 (which is part of the seat back 20) are pivotally connected at pivot 29, this common link constitutes a fair basis for evaluating the distance variation between the rear end of the seat and the backrest during a change of position illustrated by Figures 5 and 6. This change of position is generated by deformation of the parallelogram 34, i.e. by modifying the length of the parallelogram lever 35 controlled by the motor 40, which in turn causes conjoint rotation of the lever arm 31 and the column 41 about pivot 29, as this is to be seen when passing from Figure 5 to Figure 6. The longer sides of the parallelogram are formed by the seat support bar 42 and the parallelogram lever 35 shown in Figure 4. In this respect the reader will rectify for himself an evident error in Figures 5 and 6, in which the seat support bar should be correctly referenced 42 instead of 35.

The patent specification is silent about the implementation of the adjustable seat support bar 42, the telescopic parallelogram lever 35, the telescopic tubes 41/45 of the seat back or still the pivot 29. However, all these constructional elements are conventional for a skilled person and do not require further detailed description.

A priori, it seems difficult to evaluate the variation of distance between the seat and the backrest when the position is changed. However, besides the fact that said distance is not claimed, the mere observation of Figures 5 and 6 enables a skilled person to understand and to carry out without undue burden the transformation of movement resulting from a rotation of
the lever 47 about its lower axis 48 and, simultaneously, a rotation of the column 41 about the pivot 29 and a telescopic translation of the tube section 45 on the column 41. This combination of movements allows for longitudinal sliding of the backrest during its reclining, thus avoiding relative movement between the person and the backrest (the so-called shirt-pulling effect), in accordance with the problem and solution presented in the patent (see paragraphs [5], [15] and [23]).

As to claim 1, the function of which is not to give the details of the embodiment of the invention (see Articles 69, 84 and Rule 43(1) EPC), the position of the lever 47 is clearly indicated in both parts of the claim and the feature according to which, on a change from the standing or the lying position (Figure 6) to the sitting position (Figure 5 or 4), the backrest 20 (and the tube section 45) is moving away from the rear end of the seat support 18, is clearly achieved, the pivot 29 being considered a fixed reference as suggested above.

Contrary to the assertion of the appellant, the result is thus attained by the features of claim 1. This is also supported by the fact that the invention was correctly understood by both parties, who argued contradictorily upon the merits of the invention with respect to the prior art.

Accordingly, the invention is disclosed in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art. The requirements of Article 100(b) EPC are therefore met.
3. Late filed submissions

3.1 Documents D12 and D13 were submitted with letter of 21 May 2010, almost one year after the statement setting out the grounds of appeal was filed. The alleged reason for filing these documents late was their high relevance in respect of claim 1.

According to Article 12(2) and (4) of the Rules of Procedure of the Boards of Appeal (RPBA), the statement of grounds of appeal and the reply should contain a party's complete case, i.e. specify all the facts, arguments and evidence relied upon. If subject-matter is filed later, it may only be admitted and considered at the Board's discretion. The discretion shall be exercised in view of inter alia the complexity of the new subject-matter submitted, the current state of the proceedings and the need for procedural economy (Article 13(1) RPBA).

In the present case, it is the Board's view that prima facie D12 and D13 do not come closer to claim 1 than the documents already on file, in particular D1. To examine them in more detail at that late stage of the proceedings would not accord with the need for procedural economy. These documents are therefore not considered according to Article 13(1) RPBA.

3.2 By letter of 14 February 2011, i.e. two days before the oral proceedings, the appellant submitted a new line of arguments based on the combination of documents D5 and D7, both acknowledged in the patent specification, without further explanation for this late submission.
than that it was for the sake of completeness. The admissibility of this new attack was contested by the respondent.

3.2.1 D7 was dealt with for the first time in the statement setting out the grounds of appeal in combination with D1 or D2, in order to challenge the patentability of claim 1. These combinations were discussed by both parties in their written submissions. D7 was therefore introduced into the proceedings under Article 12(2) RPBA.

3.2.2 D5 was neither considered during the first instance proceedings nor dealt with by the appellant in the statement setting out the grounds of appeal.

A document is not automatically scrutinized in opposition or opposition appeal proceedings, even if it is quoted and acknowledged in the contested European patent and even if it is cited in the description of the patent itself as the closest prior art and the technical problem was formulated on the basis of it, unless it is expressly cited within the opposition period (see Case Law, 6th Edition 2010, VII.C.1.7 and in this context decision T 536/88, in which a document has been acknowledged in the patent description as the closest prior art).

It follows from this jurisprudence that D5 was not automatically in the proceedings and was not submitted in time at the appeal stage under Article 12 RPBA. This document is, therefore, to be considered late filed. For this reason, it can only be considered at the
Board's discretion according to the criteria set out in Article 13(1) RPBA.

D5 does not represent the closest prior art. This fact was not disputed by the appellant. It was nevertheless used in combination with document D7, which combination was never considered before but could have been submitted and discussed at an earlier stage. No convincing reasons were submitted to explain why this combination of documents D5 and D7 was introduced at that late stage of the procedure. The admission into the proceedings of this new combination would have prejudiced the other party by confronting it with a new line of arguments for which it was not prepared and furthermore would have complicated the procedural situation for the Board. This situation is contrary to the need for procedural economy and is not justified by higher ranking procedural interests of any other party or of the public.

The approach followed in decision T 536/88, referred to by the appellant, is not appropriate in the present case because, as mentioned above, D5 does not represent the closest prior art.

D5 is therefore not admitted into the proceedings under Article 13(1) RPBA. It follows that the combination of documents D5 and D7 is not taken into consideration by the Board.
4. Inventive step - main request

4.1 Starting from D2

D2 is the prior art from which the present invention originates. It is illustrated in the patent in suit by Figures 1 and 2, which are similar to Figures 1 and 2 of D2, while using different reference signs. This prior art is properly acknowledged in the patent in paragraphs [5], [11], [12] and [19], respectively. For convenience, reference will be made to Figures 1 and 2 and associated reference signs of the patent, in place of those of D2.

More specifically, this prior art discloses a raising wheelchair comprising a wheel frame 11 and a raising frame 21, said raising frame being connected to the frontal portion of the wheel frame and comprising a seat support with a seat 17, a seat back support 19 and a backrest 20, and on each side of the raising frame a lever parallelogram 34 for maintaining the backrest vertical in the sitting position as well as in the standing position of the user, said lever parallelogram comprising a seat support bar 42 and substantially parallel thereto a parallelogram lever 35, both being pivotally connected with one end to the front of the wheel frame 11 and with the other end to a lever arm 31 comprised in said seat back support 19.
However, this prior art does not disclose:

- on each side of the seat back support, a column and a tube section telescopically movable thereon, to which said backrest is connected, and

- a lever connected between the lever parallelogram and the backrest for moving, both on a change from the standing position to a sitting position, or vice versa, the backrest away from the rear end of the seat support, or toward the rear end of the seat support, respectively,

- whereby said lever is pivotally connected at one end to the rear portion of the seat support and at the other end to the tube section.

As summarised in paragraphs [5] and [12] of the patent, this conventional raising wheelchair provides for keeping the backrest in practically the same nearly vertical position both in the sitting as in the standing position, but does not permit a lying position, and further has the disadvantage that a shirt-pulling effect can take place.

Therefore the problem addressed by the above mentioned distinguishing features, is to provide a raising wheelchair which does not have the disadvantages of D2, as recited in paragraph [13] of the patent in suit.

D3 does not disclose any raising wheelchair of the type as claimed but a reclining chair having only a tiltable seat back from a sitting position into a lying position. In the following, reference will be made to
document D3a (French document corresponding to D3), which is more explicit than D3 and includes two additional figures.

With a view to avoiding a shirt-pulling effect, the mechanism of D3a comprises among other things a lever 8 pivotably connected between the seat back 2 and a lever parallelogram including a seat support 9, an operating rod 4 and a lever arm 1a. The kinematics developed in Figure 2 show that when the backrest is changed from the sitting position to the lying position, it is moved towards the rear end of the seat, in accordance with the corresponding feature in claim 1 at issue.

However, unlike the present patent, D3 does not disclose on each side of the backrest an arrangement having telescopic tubes, but instead a centrally positioned guiding system mounted behind the seat back 2 (see Figures 4 and 5 of D3a) and comprising a pair of complementary V-shaped guide members 10, 12 for permitting vertical sliding movement of the seat back 2 along the back support 1 (Figures 3 and 4). Further, only one lever 8 is provided at one side of the reclining chair and this lever is not connected to one element of the guiding system but directly to the seat back (point P in Figure 3). Differently, in the patent in suit a lever 47 is provided on each side of the wheelchair and connected to one of the telescopic tubes (see Figure 3). Unlike the present patent, the other end of the lever 8 of D3a is not connected to the rear end of the seat support, but about an axis PF of a bracket secured at about the middle of the seat support 9 (Figure 2).
It appears, therefore, that the different elements of
the mechanism disclosed in D3a and in particular the
structure and position of the connecting elements
differ considerably from those of the present patent
and would not allow the skilled person to arrive at the
combination of claim 1, starting from D2. In
particular, in D3a the bracket to which the lever 8 is
pivotably connected constitutes a protruding part which
would hinder the transfer of a person lying on the
wheelchair into a bed, which is just one of the
drawbacks that the present patent is trying to avoid.

D7 discloses a wheelchair having a vertically sliding
backrest fixed between telescopic tubes 14, 17 for
guiding the linear movement of the backrest. However,
shirt-pulling compensation is not specifically
required. The purpose of this disclosure is only to
raise a person from the seat to improve blood
circulation.

Starting from D2, a consideration of the teaching of D7
(telescopic tubing) in addition to that of D3, would
not be sufficient to arrive at the combination of
claim 1. Further modifications of D3 would still be
necessary, e.g. concerning the connections of the lever
to the backrest and to the seat support as mentioned
above. Moreover, consideration of these documents is a
typical indication of ex-post facto reasoning.

D8 is not concerned with a raising wheelchair and has
no lever parallelogram. Document E15, taken from a
spare parts catalogue of the Corpus seat of Permobil,
is an exploded view more explicit than the other
documents produced under the reference D8, but
nevertheless insufficient in the absence of any description of the structure and functioning of the wheelchair or additional drawings showing the structure after assembly. The declarations provided in support of E15 have been duly considered by the Board, the conclusion of which is as follows:

E15 shows only one lever 2 (angled bracket) placed on one side of the seat back frame and connected at one end to an elongated arm indicated with reference numerals (2) 3-13. However there is doubt as to the manner in which this elongated arm is connected to the back-cushion carrying structures, also called back shell. Similarly there is doubt about the position of this back shell with respect to the H-shaped seat back support, vertically mounted on the seat support, and about the manner in which the alleged sliding movement is performed. Assuming that the backrest is telescopically mounted on the seat back support, said back support identified by the appellant as lateral columns for guiding the sliding backrest (letter of 26 June 2009, page 19) clearly has a squared cross-section and not a circular cross-section as required by claim 1 at issue.

Further, the other end of the angled bracket is free (unconnected) in the drawing. Therefore, there is further doubt as to the connection of this lever and, if connected to the seat support, about the position of the connection on the seat support. The photographs A1 submitted by the respondent are irrelevant to clarify E15. They show another type of wheelchair comprising two sliding elements attached to the back frame, two gas springs and a central strap.
It results therefrom that D8 does not disclose or suggest the features which are missing in D2 or D3, either, i.e. principally a lever on each side of the raising frame, connected at one end to the rear portion of the seat support and at the other end to the tube section attached to the backrest.

The subject-matter of claim 1 therefore involves an inventive step vis-à-vis the teaching of D2 taken in combination with any of D3, D7 or D8.

4.2 Starting from D1

D1 is acknowledged in paragraphs [2] and [10] of the patent in suit and represents the closest prior art document. It discloses (see Figures 1 to 4) a raising wheelchair comprising a wheel frame 22 and a raising frame 36, said raising frame being connected to the frontal portion of the wheel frame and comprising a seat support 44 with a seat 126, a seat back support 42 and a backrest 196 (see Figure 5), said seat back support comprising on each side a column 202 and movable thereon a section 200, to which said backrest is connected. More specifically, the seat back support comprises an outer back frame 42 slidably mounted on an inner back frame 40 by means of rails 203 and tracks 204, respectively, provided on opposite sides of the back frames (Figure 5).

Moreover, a lever 198 is provided between a parallelogram system and the backrest for maintaining the backrest vertical in the sitting position (Figure 4) as well as in the standing position.
(Figure 6) and for moving both on a change from the standing or a lying position (Figure 7) to a sitting position, the backrest away from the rear end of the seat support (compare for example the extension of the inner back frame 40 in Figures 4 and 6).

Further, the parallelogram system comprises a seat support bar 44 and substantially parallel thereto a parallelogram lever 164 actuated by an actuator cylinder 170 (Figures 4 and 6), both being pivotably connected with one end to the front wheel frame (Figure 3) and with the other end to a lever arm 160.

However, the raising wheelchair of D1 does not comprise a lever parallelogram on each side of the raising frame, but a single parallelogram system centrally positioned, as seen in Figure 5. Moreover, a single lever 198 is centrally and pivotably connected behind the chair between the back support and the parallelogram system. More specifically, this lever is connected at one end to an intermediate segment 182 of the parallelogram system (see Figure 6 and column 13, lines 17-20) and at the other end to a cross bar 210 on the outer back frame 42 (Figure 5). Therefore, the lever 198 is not connected, as required by claim 1 in suit, on each side of the raising frame and not at one end to the rear portion of the seat support and at the other end to a tube section, to which the backrest is also connected.

Finally, D1 does not disclose on each side of the back support a column telescopically movable on a tube section to which the backrest is connected, as illustrated in Figure 3 of the patent in suit, but
instead guide rails and tracks 203/204 are mounted on opposite sides of the outer and inner back frames 42/40 and behind the backrest 196 (Figure 5).

It results therefrom that the raising wheelchair of D1 differs from that of claim 1 in suit by a number of structural features.

The problem underlying the present patent, therefore, can be defined as the provision of an alternative, more simple embodiment for a raising wheelchair which avoids a shirt-pulling effect.

It is convincingly set out by the respondent that the solution according to the claimed subject-matter has the advantage that by this construction the lever, which is appropriately connected between the backrest and the seat support, does not hinder lateral transfer of a person from the wheelchair to a bed or vice versa, and since the combination of said lever and said telescopic column/tube section is less visibly provided on both sides of the raising frame, backrests of different designs and thicknesses may be conveniently placed therebetween.

As explained in detail in point 4.1 above, none of documents D3/D3a, D8 or D7 discloses on each side of the raising frame a lever parallelogram and a lever pivotally connected at one end to the rear portion of the seat support and at the other end to a telescopic tube section, to which the backrest is connected, in accordance with the features of claim 1 at issue.
Therefore, if only for these reasons, the skilled person would not arrive at the claimed combination of features, starting from D1 and having regard to the teachings of D3/D3a, D8 or D7 separately or in combination. Moreover, these documents are not concerned with a raising wheelchair of the type as claimed, so that the skilled person would hardly consider them unless with hindsight.

It results that the subject-matter of claim 1 involves an inventive step vis-à-vis the teaching of D1 taken in combination with any of D3/D3a, D8 or D7. The provisions of Article 56 EPC are therefore met.

**Order**

**For these reasons it is decided that:**

The appeal is dismissed.

The Registrar:  
The Chairman:

D. Sauter  
M. Noël