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European Patent Office
80298 Munich
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Zacco ref

OP396155EP00

Date

27 December 2024

Your ref

Owner

Viking Arm AS

Case

Opposition against Patent Registration Høydejusteringsmekanisme
No. 3953541 in EPC

Dear Sir/Madam

Reference is made to the notice of opposition dated 05.08.2024 filed by the opponent Black & Decker, Inc. ("the opponent") and to the communication of notice of opposition pursuant to R. 79(1) EPC forwarded on August 27, 2024.

Pursuant to Rule 79(1) EPC, as stated in the notice of opposition, the period for filing observations concludes four months from the date of notification of the communication. Accordingly, these observations are submitted within the prescribed time limit.

Request

Proprietor requests maintenance of the patent as granted, or auxiliary according to claims of the enclosed Auxiliary request.

In case the Proprietor's main request cannot be accepted, oral proceedings are requested in accordance with Art. 116 EPC.

Language of the oral proceedings

If oral proceedings are to be held, translation into English is requested in accordance with Rule 4 EPC in case the opponent and/or employees of the EPO intend to express themselves in another language than the language of the proceedings.

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VAT No. NO 982 702 887 MVA

Documents

D1	US 2,820,608
D3	Volkswagen Aktiengesellschaft, Instruction Manual for Car Model 1200 published in August 1964
D4	Public prior use of a BILSTEIN jack- document showing photos of the jack.
D4a	Email from Braselmann confirming manufacture of jack shown at D4
D4b	Machine translation of D4a
D4c	Declaration of Dieter Braselmann of FERBO relating to the D4 jack
D4c	English translation of D4c
D9	US 2014/0319437 A1
D10	GB 525211
D11	DE29806101
D12	Witness statement of Daniel Mark
D14	DE10127718
D14a	English translation of D14
D15	Expert report by Mr. Jan Øyen at Semcon Norge AS, as used un UPC case No. ACT 19392/2024

Features of Claim 1

Feature	Claim 1
1.1	Lowering mechanism (12) for a hand held jacking tool (20) comprising
1.2	a jacking frame (11)
1.3	a jacking shaft (3) and
1.4	caulking gun jacking mechanism comprising
1.5	at least one jacking plate (1) biased towards an open state and
1.6	and at least one holding plate (2), above the jacking plate (1), being biased towards a gripping state,
	wherein the lowering mechanism (12) comprises:
1.7	a lowering plate (4) on top of the holding plate(s) (2) being parallel to the holding plate(s) (2) when not activated,
1.8	a spring (9) biasing the lowering plate (4) towards the holding plate,
1.9	a thumb operable pushing lever (5),
1.10	a release lever (10), which is an extension of the holding plate

	characterized by
1.11	a hinge attachment (6) connecting the pushing lever (5) to the lowering plate (4) at a rear end towards an operating handle (7),
1.12	a pivot structure (8) connected to the pushing lever (5) or holding plate(s) (2) a distance backward from the hinge attachment (6),
1.13	wherein the lowering plate (4) is lifted up and grips the jacking shaft (3) when the pushing lever (5) is pushed downwards and pivots around the pivot structure (8) and in turn, pushes the holding plate(s) (2) downwards loosening it from the jacking shaft (3) and moving the frame down along the jacking shaft a distance until the holding plate(s) (2) reaches an angle that stops it against the jacking shaft while the lowering plate still grips the jacking shaft.

1. Art. 100(b) EPC Sufficiency of Disclosure

1.1 Under section 1 of the opposition, the opponent alleges that the disclosure of the Patent is insufficient for the person skilled in the art to be able to put the invention into effect, whereby the Patent would allegedly violate Art 83 EPC. This is not correct. The Proprietor thus contests the allegations made by the Opponent in paras. 1 of the opposition.

The Proprietor submits that an objection of lack of sufficient disclosure presupposes that there are serious doubts, substantiated by verifiable facts. To successfully argue that an application lacks sufficient disclosure, there must be a genuine and significant reason to doubt the adequacy of the disclosure. Thus, minor or speculative doubts are not enough. In the present case the Opponent has not made any reasonable arguments regarding serious doubts, substantiated by verifiable facts, (cf. EPO Guidelines F-III, 1, third paragraph) as will be explained below with reference to each of sections 1.1-1.12 in the Opposition.

1.2 "Multiple pivot point placement" and "the length of arms" (1.1, 1.2)

In section 1.1 the Opponent appears to argue that the disclosure lacks sufficiency since the actual distances P1-H1, H1-P2 and P2-F1 are not disclosed. These actual distances are however irrelevant.

As clearly set out in paragraph [0011] of the Patent it is the relation between these distances that are of importance. Said paragraph also gives the skilled person a clear indication of how to select the relation between these distances. It teaches the reader on the one hand that

selecting H1-P2 too long in relation to P1-H1 and P2-F1 would lead to unwanted release and, on the other hand, that selecting said relation too short would result in that the lowering mechanism is not activated.

Additionally, paragraph [0011] also teaches the reader that, at the embodiment shown in the figures, the length of the pushing lever rearward of the pivoting point 8 must be longer and preferably two times longer than the distance between the pivot point 8 and the hinge attachment 6.

The Proprietor submits that a skilled person having common general knowledge in the filed and ability would have no problem to select the relation between the distances H1-P2, P1-H1 and P2-F1 in order to arrive at a fully functioning lowering mechanism according to the invention, when studying the disclosure in its entirety including the figures. In fact, figure 5 of the Patent is a construction drawing, drawn to scale. Hence a fully functional relationship between H1-P2, P1-H1 and P2-F1 may readily be achieved simply by measuring these distances in figure 5.

1.3 "Pivot structure on the pushing lever" (1.3 – 1.6)

In section 1.3 of the Opposition, the Opponent appears to argue that one of the alternatives set out in feature 1.12 of Claim 1, wherein the pivot structure is connected to the pushing lever, is not sufficiently disclosed.

The Proprietor submits that Art 83 EPC in conjunction with Rule 42(e) EPC stipulates that the description shall describe in detail at least one way of carrying out the invention claimed, using examples where appropriate and referring to the drawings if any. Hence already from the EPC itself it is clear that it is sufficient that the specification discloses one way to carry out the claimed invention. This has repeatedly been confirmed by the EPO Boards of Appeal (see CLBA 10th ed. II-C, 5.2).

Additionally, according to established case law, as set out in CLBA 10th ed. II-E, 2.3.3:

The skilled person when considering a claim, should rule out interpretations which are illogical or which do not make technical sense. He should try, with synthetical propensity, i.e. building up rather than tearing down, to arrive at an interpretation of the claim which is technically sensible and takes into account the whole disclosure of the patent (Art. 69 EPC). The patent must be construed by a mind willing to understand, not a mind desirous of misunderstanding.

In the present case, when studying sections 1.1-1.12 of the opposition, it is evident that the Opponent does not construe the Patent by a mind willing to understand but rather by a mind desirous of misunderstanding.

1.4 "Lowering plate gripping state" (1.7-1.11)

In sections **1.7-1.11** of the Opposition argues that there is a contradiction between paragraph [0009] of the description and feature 1.13 of Claim 1. This is not correct.

As recognized by the Opponent paragraph, [0009] should be read in conjunction with paragraph [0007] which states that the holding plate is arranged above the jacking plate and being biased towards a locking state, i.e. that the holding plate is biased towards the gripping state.

Now, paragraph [0009] sets out that the lowering plate is arranged on top of the holding plate and is in the same gripping state as the holding plate when not activated.

It should thus be noted that paragraph [0007] does not state that the holding plate necessarily is in the gripping state, merely that it is biased towards the gripping state. The same thus applies to the lowering plate when not activated. Since the lowering plate is in the same gripping state as the holding plate, also the lowering plate is biased towards the gripping state but it does not necessarily need to actually grip the jacking shaft when not activated.

Hence, also if Claim 1 is construed in the light of paragraph [0009] there is no contradiction in that the lowering plate which is biased towards the gripping state when not activated, during activation by pushing the pushing lever is lifted and then assumes the gripping state where it actually grips the jacking shaft as specified by feature 1.13

Thus, the Proprietor maintains that there is no contradiction between the description and the claim and that the Patent therefore does not violate Art. 83 EPC for this reason either.

1.5 "Claim 3" (1.12)

In section 1.12 of the Opposition, the opponent argues that the particular embodiment set out in dependent Claim 3 is not sufficiently disclosed. To this end the Proprietor again refers to Art 83 in conjunction with Rule 42(e) EPC and CLBA 10th ed. II-C, 5.2 which make it clear that not all embodiments of a patent need to be disclosed in detail and that the requirements of Art 83 are satisfied as long as one embodiment is sufficiently disclosed for it to be carried out.

2. Art. 100(c) EPC, Art. 123(2) Alleged added subject matter,

Under section 2 of the Opposition, the Opponent argue that the patent application leading to the Patent, during prosecution, was amended in a manner violating Art 123(2) EPC. The Proprietor does not agree.

The Proprietor agrees that the Patent application, during prosecution, was amended by incorporating feature 1.10 into Claim 1. The feature incorporated into Claim 1 specifies that the lowering mechanism comprises:

a release lever, which is an extension of the holding plate.

The Proprietor maintains that the introduction of this feature into Claim 1 was not an impermissible intermediate generalization and did not violate Art 123(2) EPC. Said feature was disclosed in the Patent application as originally filed in original claim 2, which read:

2. Lowering mechanism according to claim 1, wherein the rear end of the pushing lever (5) and a release lever (10), which is an extension of the holding plate is positioned beside each other for easy operation by the thumb of an operator.

It was also disclosed in the description on page 5, lines 1-4 of the originally filed Patent application which reads:

In one embodiment the rear end of the pushing lever and a release lever 10, which is an extension of the holding plate 2, is positioned beside each other for easy operation by the thumb of an operator as seen in figure 3, 4.

Even though these passages relate to one embodiment of the invention, they clearly define two separate features:

- a) That the lowering mechanism comprises a release lever which is an extension of the holding plate.
- b) That the rear end of the pushing lever and the release lever is [are] positioned beside each other.

From said passages it is clear that it is feature b) which results in the easy operation by the thumb of the operator.

Feature a) on the other hand provides the following two effects:

- i) The fact that the lowering mechanism comprises a release lever results in that the lowering mechanism, in addition to providing adjustable stepwise downward movement of the frame by operating the pushing lever, also allows release of the frame from the jacking shaft.
- ii) The fact that the release lever is an extension of the holding plate results in that the required force to be applied to the holding plate for accomplishing release of the frame may be reduced.

From the above it is clear that abovementioned feature b) on the one hand relates to easy operation of the lowering mechanism by the thumb whereas feature a) on the other hand relates to providing the lowering mechanism with a release function in an efficient way.

Thus, the two features a) and b) relate to mutually unrelated functions and advantages, and the technical means for accomplishing these functions and advantages are different for the respective feature. It follows that the skilled person would readily recognize that there is no structural or functional relationship between feature a) and b).

According to established case law of the EPO Boards of Appeal, a specific feature which is originally disclosed only in combination with other features may be extracted and used for delimiting the claimed subject-matter as long as there is no structural and functional relationship between the features. See e.g. Case Law of the Boards of Appeal, (10th ed), II.E.1.9.1, T1159/98.

Hence, even though the two features a) and b) in the description of the Patent application as originally filed were disclosed in combination in a single embodiment, the extraction of only feature a) for delimiting Claim 1 was allowed since there was no structural or functional relationship between the two features.

In the present case, the two features a) and b) were also disclosed in combination in original dependent Claim 2. However, also in such cases it is according to case law allowed to extract one of the features for limiting the subject matter of the independent claim as long as there is no functional or structural relationship between the extracted feature and the other features of said claim or between the extracted feature and the teaching of other dependent claims referred to in that dependent claim. See CBLA, 10th ed II.E.1.9.2 and T582/91.

The Proprietor thus maintains that the amendment of Claim 1 made during the prosecution of the Patent application did in fact not violate Art 123(2) EPC and that the Opponents claim for revocation on the basis of this ground is also unfounded.

3. Art. 100(a) EPC The patent is novel and Inventive

3.1 In sections 3-9 of the opposition the opponent alleges that Claims 1, 2, 4, 5, and 6 lacks inventive step over D1, D10 and D14.

The Proprietor contests this and maintains that each of Claims 1, 2, 3, 4, 5 and 6 are not only novel but also involve an inventive step over the prior art at hand.

For the sake of completeness and ease of understanding we first presents below an explanation as to novelty and thereafter provides its analysis of inventive step of said Claims to rebut the opponents unfounded allegations to that effect.

Briefly about novelty

3.2 D1 (US 2820608 A)

D1 discloses a jack comprising a support member 4, a shaft 5, a first clamping member 1, a second clamping member 2 arranged above the first clamping member 1, a third clamping member 3 arranged above the second clamping member 2, a coil spring 10 for constantly urging the second clamping member 2 into an unclamping position, and a cam 11 formed with a sleeve portion 11b. The cam 11 is pivotally mounted on the second clamping member 2 at 11a and is adapted to engage a cam surface 1d formed on the first clamping member 1 (Fig. 1).

Claim 1 of the Patent defines a lowering mechanism for a hand held jacking tool. The jack in D1 is not a hand held jacking tool and no mechanism of the jack in D1 is suitable for a hand held jacking tool.

Since the jack in D1 is not hand held, D1 fails to disclose a lowering mechanism for a hand held jacking tool, according to Claim 1. As a consequence, this implies that each feature of such lowering mechanism in claim 1 is also absent in D1.

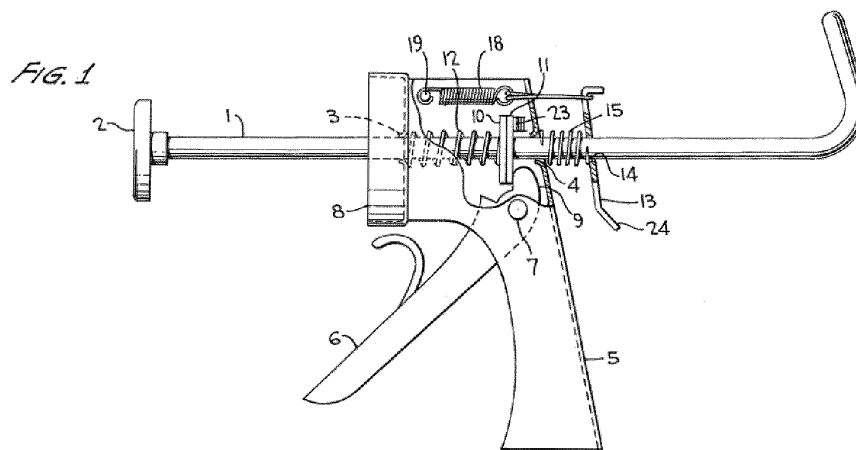
Hence, D1 fails to disclose feature 1.1 and consequently also fails to disclose each of features 1.2-1.13 of Claim 1.

Claim 1 of the Patent further defines a caulking gun jacking mechanism (feature 1.4). Thus, the jacking mechanism is not just any mechanism but should resemble that of a caulking gun.

One example of such jacking mechanism is disclosed in US 4009804 A (referenced in paragraph [0002] of the patent). D1 does not disclose any jacking mechanism of the caulking gun type.

The opponent has also not provided any argument that this would be the case. The opponent merely state that they agree that such a mechanism is well-known. This does however not imply that D1 discloses such mechanism.

For a clear understanding of such known caulking gun jacking mechanisms fig. 1 of US 4009804 is reproduced below:



Just as all caulking gun jacking mechanisms, the one shown in US 4009804 comprises a set of jacking plates 10, 11 and at least one holding plate 13. They also comprise a handle 5 and a pivotal trigger 6 for operating the jacking plates 10, 11 to advance a shaft 1 relative to the handle. The holding plate 13 is accessible by the thumb of the operator for allowing release of the shaft 1.

The Proprietor maintains that a caulking gun jacking mechanism is a mechanism comprising a handle, a trigger, a shaft and plates for jacking and holding the shaft, which mechanism may be held and fully operated by the use of a single hand of the operator. By no means does the jack according to D1 comprise any such caulking gun mechanism.

Hence, D1 fails to disclose feature 1.4 and consequently also fails to disclose features 1.5-1.8 and 1.10-1.13 of Claim 1 by direct or indirect reference to feature 1.4.

As noted by the opponent at section. 3.4, D1 also further fails to disclose at least one holding plate above a jacking plate, according to feature 1.6 of claim 1.

Claim 1 further requires a thumb operable pushing lever. As with all claim features, this feature must not be read in isolation from the remainder of the claim. Claim 1 does not define just any mechanism comprising a thumb operable pushing lever, but a lowering mechanism for a hand held jacking tool comprising a thumb operable pushing lever. Since D1 fails to disclose a lowering mechanism for a hand held jacking tool, D1 also fails to disclose a thumb operable pushing lever in the context of such hand held jacking tool, according to claim 1.

The opponent states in the Claim table for D1 under section 3.3 that "*Lever 11b or 11b+12 can be operated pushing lever using a thumb*".

The Proprietor cannot follow this reasoning. In the Claim table for D1, the opponent argues that the "that D1 does not disclose a "pivot structure". However and in any event, it would be obvious provide such a structure in D1."

To this end the Proprietor opines that a cam not only achieves the same function but actually forms a pivot structure according to feature 1.12. However, the cam 11 according to D1 does not form or constitute a pushing lever as required by feature 1.9. In fact, D1 does not disclose any thumb operable pushing lever at all, which is required by feature 1.9.

Hence, D1 fails to disclose feature 1.9 and consequently also fails to disclose features 1.11-1.13 by direct reference to feature 1.9.

Regarding a release lever according to Claim 1, the opponent argues in the Claim table for D1 under section 3.3, 1.10 that it would be implicit from D1 that a user can directly operate an end of the first clamping member 1.

The Proprietor does not agree. The spring 7 is far too strong for such operation. Such direct operation of the end of the first clamping member 1 is also not derivable from "*the fact that clamping members 2 and 3 are in their unclamped positions when the jack is at rest*", as argued by the opponent (Claim table for D1, 1.12).

Hence, D1 fails to disclose a release lever according to feature 1.10 of claim 1.

3.3 D10 (GB 525211 A)

D10 discloses a jack comprising a supporting column 7, a housing 8, 9, a plurality of lifting plates 24, a plurality of locking plates 35 and a socket member 17 for receiving an operating handle 18. The socket member 17 is mounted for pivotal movement with respect to the housing 8, 9 on a pin 19. A pin 20 on the socket member 17 is adapted to engage the lifting plates 24.

The opponent argues at section 4.4 of the opposition that D10 would show a hand held jacking mechanism. However, the opponent does not state that D10 shows a hand held jacking tool. The Proprietor submits that D10 does not indicate that the jack would be hand held.

Since the jack in D10 is not hand held, D10 fails to disclose a lowering mechanism for a hand held jacking tool, according to Claim 1. As a consequence, this implies that each feature of such lowering mechanism in Claim 1 is also absent in D10.

Hence, D10 fails to disclose feature 1.1 and consequently also fails to disclose each of features 1.2-1.13 of Claim 1.

Claim 1 of the Patent further defines a caulking gun jacking mechanism (feature 1.4). Thus, the jacking mechanism is not just any mechanism, but should resemble that of a caulking gun. The opponent states at section 4.4 with respect to D10 that "*it is a handheld jacking mechanism which employs a caulking gun jacking mechanism (i.e. tilting plates) and has an incremental lowering mechanism.*" The Proprietor does not agree. In D10, there is no jacking mechanism of the caulking gun type. Reference can for example be made again to the jacking mechanism of the caulking gun type in US 4009804 A (referenced in paragraph [0002] of the Patent). Further and as set out in section 3.2 above, the Proprietor maintains that a caulking gun jacking mechanism is a mechanism comprising a handle, a trigger, a shaft and plates for jacking and holding the shaft, which mechanism may be held and fully operated by the use of a single hand of the operator. By no means does the jack according to D10 comprise any such caulking gun mechanism.

Hence, D10 fails to disclose feature 1.4 and consequently also fails to disclose features 1.5-1.8 and 1.10-1.13 of Claim 1 by direct or indirect reference to feature 1.4.

As noted by the opponent at section 4.3, D10 also fails to disclose a holding plate according to feature 1.6 of claim 1. D10 thereby consequently also fails to disclose features 1.8, 1.11 and 1.13 of Claim 1 which refer to the holding plate in feature 1.6.

Since D10 fails to disclose a lowering mechanism for a hand held jacking tool, D10 also fails to disclose a thumb operable pushing lever in the context of such hand held jacking tool, according to Claim 1.

At section 4.2, the opponent states that "*Incremental lowering is achieved by wedging the handle 18 between the locking plates 35 and the aperture 39 and pushing the handle 18 down on the long projection 37 of the locking plates 35. Therefore, handle 18, when wedged*

into aperture 39 provides the claimed pushing lever." This does however in no way imply a thumb operation of the lever 18 in the context of a hand held jacking tool.

Hence, D10 fails to disclose feature 1.9 and consequently also fails to disclose features 1.11-1.13 of Claim 1 by direct reference to feature 1.9.

Regarding a release lever according to Claim 1, The opponent states at 4.2 that "*Projection 37 of locking plate 35*" is equivalent to a release lever, which is an extension of the holding plate. The Proprietor does not agree. The spring 40 is too strong for such operation.

Hence, D10 fails to disclose a release lever according to feature 1.1.10 of claim 1.

3.4 D14 (DE 10127718 A1)

D14 discloses a lifting device 10 comprising first and second plier halves 16, 18, a rod 12, a lifting disc 36, first and second lowering plates 44, 50 and a spring 40. The first lowering plate 44 is extended and forms a first lowering actuation region 44b. The second lowering plate 50 is extended and forms a second lowering actuating region 50b. In the initial position of the lifting device 10 shown in Fig. 1, the first lowering plate 44 is tilted with respect to the rod 12 (paragraph [0018]) and the second lowering plate 50 is arranged substantially perpendicular to the rod 12 (paragraph [0022]).

At section 6.5 the opponent takes the position that the first and second lowering plates 44, 50 in D14 would constitute a holding plate and a lowering plate, respectively, according to Claim 1. The Proprietor does not agree.

Feature 1.7 of Claim 1 defines that the lowering mechanism comprises a lowering plate on top of the holding plate(s) being parallel to the holding plate(s) when not activated. Although the second lowering plate 50 is on top of the first lowering plate 44 in D14, the second lowering plate 50 is not parallel to the first lowering plate 44.

Hence, D14 fails to disclose a lowering mechanism comprising a lowering plate on top of at least one holding plate being parallel to the holding plate(s) when not activated, according to feature 1.7 of Claim 1.

D14 consequently fails to disclose features 1.8 and 1.1-1.13 of Claim 1 by direct or indirect reference to feature 1.7.

Notwithstanding the above, feature 1.8 of Claim 1 requires the spring to bias the lowering plate towards the holding plate. D14 teaches that the second compression spring 40 and

the return spring 54 return the first lowering plate 44 and the second lowering plate 50 to their initial position. This does not necessarily imply that the second lowering plate 50 is biased by the return spring 54 towards the first lowering plate 44.

At the lifting device according to D14, the second lowering actuation region 50b forms a rigid extension of the second lowering plate 50. Hence, even if the first 44 and second 50 lowering plates were considered to form a holding plate and a lowering plate respectively and if the second lowering actuation region 50b was considered to form a pushing lever, D14 does not disclose any hinge attachment which connects the pushing lever to the lowering plate. Also for this reason feature 1.11 is not disclosed or implied by D14.

Additionally, D14 does not disclose any pivot structure which is connected to the second lowering actuation region 50b or to the first lowering plate 44, especially not one which is arranged backward of a hinge attachment as required by feature 1.12. Hence feature 1.10 is not disclosed by D14 also for this reason.

Feature 1.13 requires that the lowering plate is lifted up and grips the jacking shaft when the pushing lever is pushed downwards. At D14 neither the second lowering plate 50 nor any other component is lifted when the second lowering actuation region 50b is pushed down.

Feature 1.13 further requires that pushing lever pivots around the pivot structure. D14 neither discloses any such pivot structure nor any such pivoting of the second lowering actuation region 50b or any other component.

Consequently D14 fails to disclose also feature 1.13

At least for these reasons, Claim 1 is novel over D14.

3.5 D4

D4 shows a car jack comprising a support member, a shaft a first clamping ring, a second ring member arranged above the first clamping ring, a third clamping ring arranged above the second clamping ring, a coil spring for constantly urging the second clamping ring into an unclamping position, and a cam formed with a sleeve portion. The cam is pivotally mounted on the second clamping ring at and is adapted to engage a cam surface formed on the first clamping ring.

The opponent alleges under section 5.7 that “*D4 discloses all the features of claim 1, except for the holding plate being above the jacking plate (in feature 1.6) and the holding plate changing angle during incremental lowering,*”

The *Proprietor* acknowledge that the opponent states that *D4* does not disclose feature 1.6 and 1.13. Consequently, the opponent admits that *D4* also fails to disclose features 1.8, 1.11 and 1.13 of Claim 1 which refer to the holding plate in feature 1.6.

The opponent alleges under section 5.6 that “*the Proprietor and the opponents have access to the material of which public prior use is alleged*” and argues that this calls for balance of probabilities (Guidelines, III-G, 4.3.2(a)).

The actual *D4* device illustrated in the opposition has not been examined by the *Proprietor*, nor is it available to the *Proprietor*. The *Proprietor* submits that the opponent has not provided evidence that the *actual* car jack they show in *D4* is in fact *an original* jack from “in, or around, 1955”. The *Proprietor* has no way of knowing if the device illustrated as *D4* is a modern copy, a modified version or a device that was available “in, or around, 1955”. The opponent has not proved up to the hilt that the device they exhibit as *D4* has the exact same properties as the original device, and the properties may be different from the exhibited device and the device that was available “in, or around, 1955”.

Given that the evidence and specific knowledge concerning the device illustrated in *D4* reside exclusively with the opponent, it is incumbent upon them to meet the strict evidentiary standard established in case law, namely, the standard of proof “up to the hilt” as articulated in T 472/92, which requires proof “beyond reasonable doubt” as clarified in T 97/94.

Nevertheless, even if one were to assume, *arguendo*, that the opponent is not held to this burden of proof, the *Proprietor* has conducted an independent examination of another device. This examination has revealed no basis for agreeing with the Opponent's assertions regarding the alleged properties of the device illustrated in *D4*. Consequently, the *Proprietor* respectfully submits that the Opponent's position lacks merit, irrespective of the evidentiary standard applied.

In this regard, the *Proprietor* submits documents *D15*, a technical report by Mr. Jan Øyen at Semcon Norge AS, wherein a Billstein car jack was evaluated by a technical expert.

Claim 1 of the Patent defines a lowering mechanism for a hand held jacking tool. The *Proprietor* submits that car jack in Billstein car jack is not a hand held jacking tool and no mechanism of the jack is suitable for a hand held jacking tool.

Since the Billstein car jack is not hand held, it fails to disclose a lowering mechanism for a hand held jacking tool, according to Claim 1. As a consequence, this implies that each feature of such lowering mechanism in claim 1 is also absent in the Billstein car jack.

Hence, the Billstein car jack fails to disclose feature 1.1 and consequently also fails to disclose each of features 1.2-1.13 of Claim 1.

As evident in D15, section 6, there are a significant number of differences between the Billstein car jack and Claim 1.

Claim 1 of the Patent further defines a caulking gun jacking mechanism (feature 1.4). Thus, the jacking mechanism is not just any mechanism, but should resemble that of a caulking gun.

As set out in section 3.2 above, the Proprietor maintains that a caulking gun jacking mechanism is a mechanism comprising a handle, a trigger, a shaft and plates for jacking and holding the shaft, which mechanism may be held and fully operated by the use of a single hand of the operator. By no means does the Billstein car jack comprise any such caulking gun mechanism.

Hence, the Billstein car jack fails to disclose feature 1.4 and consequently also fails to disclose features 1.5-1.8 and 1.10-1.13 of Claim 1 by direct or indirect reference to feature 1.4.

Claim 1 further requires a thumb operable pushing lever. As with all claim features, this feature must not be read in isolation from the remainder of the claim. Claim 1 does not define just any mechanism comprising a thumb operable pushing lever, but a lowering mechanism for a hand held jacking tool comprising a thumb operable pushing lever. Since the Billstein car jack fails to disclose a lowering mechanism for a hand held jacking tool, D4 also fails to disclose a thumb operable pushing lever in the context of such hand held jacking tool, according to claim 1.

As illustrated in the figures on page 7 of D15, it is evident that the Billstein car jack was designed to be operated using a steel rod inserted into a sleeve portion. There is no indication that the Billstein car jack was intended to function via a thumb-operable pushing lever.

Furthermore, the Opponent has acknowledged, through the submission of D3 and in section 5.2 of their opposition, that D4 purportedly pertains to a car jack for the Volkswagen Model 1200.

The Proprietor asserts that a person of ordinary skill in the art would neither attempt nor succeed in releasing the jack during intended use by positioning their finger under the mechanism, as suggested on page 17 of the opposition, with the weight of a car bearing on the jack. Such an operation would not only be impractical but also exceedingly hazardous.

Moreover, the Proprietor submits that it would be fundamentally unsafe to design or utilize a car jack with a quick-release mechanism under these circumstances. The evidence supports the conclusion that D4 or other jacks as the Billstein car jack was not intended to include such a feature, and the Proprietor firmly contends that no skilled person would adopt such an unsafe and impractical design.

4. Inventive Step

4.1 None of the jacks in D1 and D10 is a hand held jacking tool and no mechanism of these jacks is suitable for a hand held jacking tool. None of D1 and D10 can therefore be selected as the closest prior art. Reference can for example be made to page 190 of the BoA Case law (10th edition 2022), where it is stated that (emphasis added):

"The boards have repeatedly pointed out that the closest prior art for assessing inventive step is normally a prior art document disclosing subject-matter conceived for the same purpose or aiming at the same objective as the claimed invention and having the most relevant technical features in common, i.e. requiring the minimum of structural modifications."

D14 describes that a prior art lifting process where a lifting rod is swung up and down is laborious (paragraph [0002]). D14 then teaches that the invention is based on the object of creating a simply constructed lifting device which is easy to operate and functions safely (paragraph [0003]), and that operation is greatly simplified by the fact that the two handle parts automatically return to their starting position (paragraph [0005]). Thus, in contrast to D1 and D10, D14 teaches a hand held jacking tool with a caulking gun jacking mechanism.

Hence, D14 shall be selected as the closest prior art.

The Proprietor therefore contests the opponents' statements as set out in sections 3.1-3.8, 4.1-4.14 and 5.2-5.13, relating to lack of inventive step starting out from D1, D10 and D4 respectively as the closest prior art.

As detailed above, D14 fails to disclose features 1.7, 1.8 and 1.11-1.13 of Claim 1.

One technical effect generated by the distinguishing features of Claim 1 is that the lowering mechanism *"will control the downward movement of the frame along the jacking shaft in a caulking gun jacking mechanism in an adjustable stepwise manner"* (paragraph [0003] of the Patent).

This effect is also mentioned in the abstract and paragraph [0010] (emphasis added):

"pushing the holding plate downwards and loosening it from the jacking shaft and moving it down along the jacking shaft a distance determined by the pivoting action of the lever."

"The frame has moved down along the jacking shaft a distance determined by the pivoting action of the lever while the lowering plate 4 is stopping the frame from further downward movement."

At the invention according to the Patent, the adjustable manner in which the downward movement is controlled results from the specific arrangement of the hinge attachment and the pivot structure. According to the invention the hinge attachment connects the pushing lever to the lowering plate at a rear end. Additionally, according to the invention, the pivot structure is connected to the pushing lever or the holding plate at a distance backward of the hinge attachment.

This arrangement allows the lowering plate to be lifted up and to grip the jacking shaft when the pushing lever is pushed and pivots about the pivot structure and further to push the holding plate downwards.

As a result of the specific arrangement of the pushing lever, the hinge attachment and the pivot structure, the operator can choose exactly how far downward the holding plate and thereby the frame is to be moved at each push of the pushing lever. The leverage achieved by the arrangement and the relative positioning of the hinge attachment as well as the pivot structure affords for that the downward movement of the holding plate may be precisely stopped at any moment during the pushing of the pushing lever, simply by stopping pushing on the pushing lever.

Hence, the lowering mechanism according to the invention allows not merely an incremental stepwise lowering of the frame but also that the operator, at each actuation push on the pushing lever, may choose the travelled distance continuously to any position between zero and the maximum reachable distance for a full actuation push. The lowering mechanism according to the invention thus allows *control of the downward movement in an adjustable stepwise manner*

Such a continuously adjustable lowering movement is not allowed by the lifting device according to D14, which only allows lowering in a fixed incremental step for each actuation push on the second lowering actuation region 50b.

In D14, it is taught with respect to lowering the load in paragraph [0032] that since the second lowering plate 50 is tilted at the same time as the first lowering plate 44, the downward movement is inhibited again after a short distance. Thus, D14 does not obtain the above-mentioned effect. Although the lowering may be stepwise in D14, it is not in an adjustable stepwise manner.

The objective technical problem of the lifting device according to D14 is thus that it does not allow an adjustable stepwise lowering.

There is no teaching in D14 that would prompt a skilled person, faced with the objective technical problem, to modify the lifting device in D14 into anything falling within the terms of Claim 1.

Hence, Claim 1 is inventive over D14 alone.

4.2 D14 in combination with D1

D1 does not mention or indicate said objective technical problem. To the contrary, D1 sets out in col. 1, lines 17-19 and 36—35 that an object of the D3 invention was to provide a jack or lifting device which allows a load to be raised and lowered, just as in D3, in a step-wise manner.

Hence the skilled person would have no reason to search for a solution to the objective technical problem in D1.

Additionally, D1 teaches the use of a lever 12 to engage the recess 11c of the sleeve portion 11b or a recess 8c of the sleeve 8b. The skilled person would not go against the teachings in paragraph [0002] of D3 which states that such use of a lever or lifting rod is laborious.

Notwithstanding the above, should the skilled person nevertheless consider D1, D1 teaches that the jack **under all circumstances should prevent rapid and uncontrolled descent of the load** (column 1, lines 39-42). Along this line, the skilled person would use the embodiment taught in paragraph [0020] of D14 where the second lowering actuating region 50b has the same length as the first lowering actuation region 44b to prevent the first lowering plate 44 from being accidentally activated. Such solution does however not end up within the terms of claim 1 and would not contain a release lever according to feature 1.10 of claim 1.

D1 fails to mention any advantage associated with the distinguishing features of claim 1. At column 4, lines 24-34, D1 teaches that "It will be understood, however, that once this downward force has moved the clamping member 1 downwardly a distance which is just short of sufficient to move the clamping member 1 out of engagement with the cam 11, the downward force acting on the support member 4 will once again move the clamping member 1 into and maintain it in its clamping position, thereby preventing further downward movement of the support member 4 relative to the shaft 5.". Thus, D1 does not teach any advantage of the lowering functionality that goes beyond the stepwise fixed distance lowering in D14.

Thus, there is no teaching in D1 that would prompt a skilled person, starting from D14 and being faced with the objective technical problem, to modify the lifting device in D14 into anything falling within the terms of Claim 1.

Additionally, the fact that the lowering mechanism according to the Patent is inventive over the lifting device according to D1 has been confirmed through an investigation conducted by Mr. Jan Øyen at Semcon Norge AS.

The expert report from this investigation is enclosed as **D15**. At the investigation the well-know car jack has been thoroughly investigated and tested. The Proprietor maintains that the Bilstein jack in fact embodies the Lifting Device as shown and described in D1 with reference to figs 1 and 2 of D1.

During the investigation, the Bilstein jack was also compared with the disclosure in the Patent and with Proprietor's own product the VIKING ARM®, which product embodies the hand held jacking tool with lowering mechanism according to the Patent.

As set out in the report, the investigation resulted in the conclusion that the Bilstein jack according to D1 differs from what is disclosed by the Patent and from the Proprietor's product embodying the Patent in many structural and functional aspects. The report also concludes that the Bilstein jack could not easily, if at all, be modified into a product as disclosed by the Patent.

The report thus further supports that the lowering mechanism according to Claim 1 involves an inventive step in regard of D1 *per se* and in combination with D10 or D14.

Hence, Claim 1 is inventive over D14 in combination with D1, and D14 in combination with D4.

4.3 D14 in combination with D10

As set out in D10 page 1 lines 25 -31, the invention according to D10 was primary directed to a jack construction of the friction type in which locking plates are used for effecting an elevation of an object and for preventing downward movement.

On page 1, lines 59 – 70 it is further set out that an object of the invention was to provide a jack construction wherein the gripping forces are distributed throughout a relatively large area thereby reducing the unit pressure encountered during use.

Consequently, D10 does not mention or indicate the objective technical problem as set out above and the skilled person would therefore have no reason to turn to D10 for finding a solution thereto.

Additionally, D10 teaches the use of a lever 18 to engage the socket member 17 or the aperture 39. The skilled person would not go against the teachings in paragraph [0002] of D14 which states that such use of a lever or lifting rod is laborious.

Notwithstanding the above, should the skilled person nevertheless consider D10, D10 fails to mention any particular advantage in connection with lowering functionality, and even less such advantage associated with the distinguishing features of claim 1. At page 4, lines 104-112, D10 teaches that "This downward movement [of the housing] will cause the operating handle to fall away from the hand of the operator, thus causing the locking plates 35 to again grip the supporting column 7 until the operator's hand is moved downwardly sufficiently to tilt the plates 35 an amount sufficient to partially release them from engagement with the supporting column". Thus, D10 does not teach any advantage of the lowering functionality that goes beyond the fixed distance lowering in D14.

Thus, there is no teaching in D10 that would prompt a skilled person, starting from D14 and being faced with the objective technical problem, to modify the lifting device in D14 into anything falling within the terms of claim 1.

Hence, Claim 1 is inventive over D14 in combination with D10.

4.4 Alternative to D14 as closest prior art.

The Proprietor maintains that document D14 is the only suitable starting point in the present case, being the only document relating to a lowering mechanism for a hand held jacking tool comprising a caulking gun mechanism. However, for the sake of completeness, the inventiveness starting from D1 and D10 respectively has also been assessed below.

4.4.1. Starting from D1

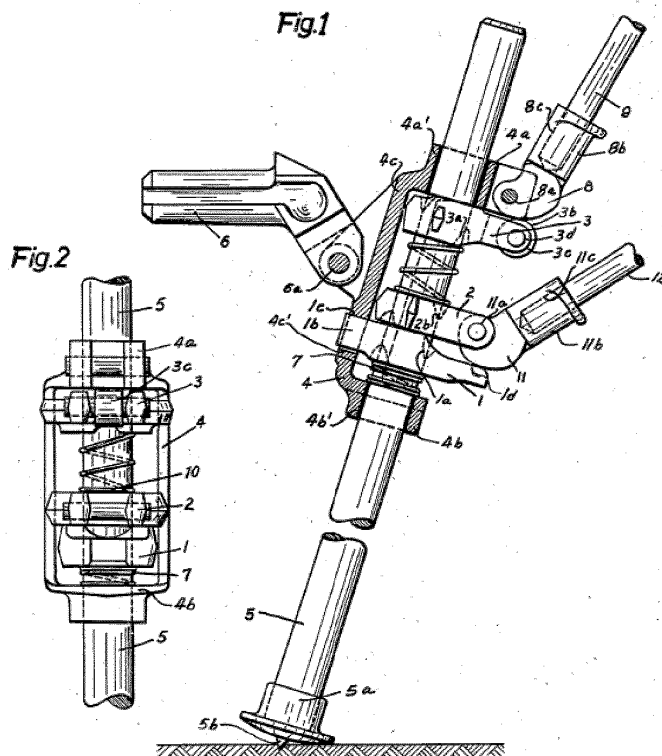
An assessment of the inventiveness starting from D1 is conducted below. However, we maintain that D1 could not be considered as the most promising starting point since it shows a lowering device for a completely different tool than what is claimed in claim 1.

In section 3.3, table 1.12 the opponent states that: *“the incremental lowering mechanism of D1 operates in a similar way to the lowering mechanism of claim 1, other than cam 11 is used instead of a pivot structure. Therefore, the objective technical problem may be regarded as how to provide an alternative way of lifting the lowering plate 2..”*

D1 aims at providing a lifting device or jack which under all circumstances prevents rapid and uncontrolled descent of the load supported by the lifting device, since *“it has been found, however, that in existing lifting devices there exists danger that the load acts in such a manner as to overcome the normal step-wise operation of the device so that during raising and more frequently during lowering the load will fall in one uninterrupted movement.”* (col. 1, lines 24-29 of D1)

Thus, the aim of D1 is to prevent danger rather than to provide increased control over the downward movement, such as is the aim of the patent.

The device of D1 is shown in the image below.



The Proprietor maintains that D1 at least fails to disclose the following features:

- 1.1 “hand held jacking tool”
- 1.4 “caulking gun jacking mechanism”
- 1.6 “holding plate above jacking plate
- 1.9 “thumb operable pushing lever”
- 1.10 “release lever

Feature 1.6: holding plate above jacking plate

The Opponent states in section 3.8 that the relative position of the holding plates and the jacking plate is simply a matter of obvious routine design choice.

The Proprietor submits that the this is not correct, as holding plate and the jacking plate interact with the features of the lowering mechanism. For example, the lowering plate is arranged on top of the

holding plate and biased towards the holding plate, and the release lever is an extension of the holding plate.

By arranging the plates in this way, a lowering mechanism is provided which can be operated by the thumb, while not needing to let go of the grip used for lifting.

Thus, even if the claim was read as a lowering mechanism suitable for a jacking tool having the holding plate arranged above the jacking plate, the position of these features still imposes clear limitations on the design of the lowering mechanism.

Feature 1.9: “thumb operable pushing lever”

As previously explained, D1 makes no mention of a thumb operable pushing lever. There is no lever in D1 which could at all be operated by the force of a thumb. Furthermore, even in the theoretical case that the force needed to operate the levers in D1 should be very low, they would still not be regarded as thumb operable as this is clearly not how the device is intended to be used.

Again, this is not mentioned in D1. Instead, it is clear from the problem formulation in D1 that it aims at lifting of heavy objects. Especially, D1 does not suggest that the device could be adapted to loads so small that the lowering mechanism could be operated by a thumb.

Opponent further states in 3.3, that “*Lever 11b or 11b+12 can be operated using a thumb*”. This seem to imply to the Opponent that either the lever 12 or the sleeve 11b is operable by the thumb of the user.

The Proprietor has a hard time following this statement. It is very clear to a skilled person examining D1 that the lever 12 is configured to be operated by the movement of an arm, and that it would not be suitable or even possible to operate it by a thumb.

As already mentioned, the device in D1 could not be considered to include tools suitable only for very low weight loads, as the specification specifically aims at preventing danger due to rapid lowering. However, even if the device in D1 were adapted for very low weight loads, the lever would still not be regarded as thumb operable, since operation of the lever by a thumb would require the operator to use the arm in a very awkward, and in no way ergonomical, position.

Feature 1.10: “release lever”

The Proprietor states that there is no disclosure of a release lever in D1.

There is no doubt that the term “release lever” in the technical field of the application relates to a lever which could at least suitably be operated to release the load. The extension in 1d would not at all be suitable for such purpose. If it, hypothetically, was at all possible to manipulate the lever 1d in order to release the load, such operation would be very dangerous and include a high risk of the operator being pinched and/or crushed under the load.

Assessment of Inventive step starting from D1

In light of the identified differences, a lowering mechanism which allows for adjustable stepwise downward movement in a hand held jacking device is provided.

Opponent states in section 3.4 that the relative positioning of the holding plate to the jacking plate does not have any technical effect and is thus a mere design choice.

However, from looking at e.g. Fig. 1 of the present invention, it is very clear that if the jacking plate was arranged above the holding plate (and thus, by consequence, also above the lowering plate) the thumb operable lever could no longer be reached by an operator holding the operating handle. The relative positioning of the plates thus has a clear effect on the usability of the device.

Objective technical problem

An objective technical problem may thus be formulated as how to provide a lowering mechanism which allows for adjustable stepwise downward movement, in a hand held jacking device.

Using D1 only

There is no teaching in D1 that would prompt the skilled person, faced with the objective technical problem, to modify the lifting device in D1 into anything falling within the terms of Claim 1.

While the skilled person may be aware of lifting devices having a caulking gun mechanism, there are no clues in D1 on how to modify the lowering mechanism to be suitable for such device.

In section 3.6 and 3.7, the opponent alleges that “*Arranging the holding plate above or below the jacking plate has no bearing on the function of any of the other features of claim 1*” and refers in this regard to D9 and D11.

Furthermore, the opponent alleges that D11 (DE29806101) D9 (US 2014/319437 A1) “*illustrate common general knowledge*.”.

The Proprietor does not agree.

D9 is silent regarding both a jacking plate and holding plate. Fig. 8 in D9 (reproduced below), and para. [0045] disclose totally different mechanisms, namely a ratcheting mechanism 46, not a caulking gun jacking mechanism as defined in Claim 1

Furthermore, D9 discloses different embodiments, for instance illustrated by fig. 12 (reproduced below) where the handle and “release lever 29” is at different positions to achieve different results.

Thus, D9, contrary to the oppositions statement, does not indicate that any part of its construction is a matter of routine design choices, nor can it be used as common general knowledge to lead a skilled person to unmotivated alterations of the closest prior art.

Furthermore, D11 discloses a caulking gun mechanism, however, contrary to the oppositions statement, D11 does not indicate that any part of its construction is a matter of routine design choices, nor can it be used as common general knowledge to lead a skilled person to unmotivated alterations of the closest prior art.

4.4.2 Assessment of Inventive step over D10 + D1

The invention according to the patent provides a lowering mechanism which can control the downward movement of the frame along the jacking shaft in an adjustable stepwise manner.

An objective technical problem may thus be formulated as how to control the downward movement of the frame along the jacking shaft in an adjustable stepwise manner.

While the skilled person starting from D10, and trying to solve the objective technical problem, might be able to find D1, the skilled person would have no reason to look in D1 searching for a solution to the problem, since D1 makes no mention of adjustable stepwise lowering of the frame.

In addition, even if the skilled person would decide to look in D1 for a solution, the skilled person would not be able to combine the teachings therein with the lifting device of D10.

Furthermore, even in the theoretical case that the skilled person *would be* able to incorporate selected features, such as a lowering plate, from D1 into the device of D10, the obtained device would still lack several features as compared to the invention of claim 1. For example, both D1 and D10 fail to disclose a lowering mechanism for use in a hand held jacking tool, a thumb operable pushing lever with a caulking gun mechanism, a lowering plate arranged on top of a holding plate, and a release lever.

The implementation of these lacking features are neither obvious to a person skilled in the art.

A skilled person starting from D10, and turning to D1, would thus not be able to achieve the invention of claim 1.

Assessment of Inventive step over D10 + D14

A skilled person starting from D10 and wanting control the downward movement of the frame along the jacking shaft in an adjustable stepwise manner, would not turn to D14. Although D10 and D14 both relate to lifting devices, it is evident already from Fig. 1 of D10 and D14 respectively that their constructions are so different that they could hardly be considered to belong to the same technical field. While D10 relates to a lifting device intended to be operated by a removable handle, D14 makes use of a handgrip with a trigger for its operation. D10 and D14 thus relates to different types of tools, and it would not be possible to combine the lowering mechanism of D10 with the handgrip and lowering plates of D14 without completely changing its construction.

Seemingly, the only way to implement features from D14 into D10 without extensive inventive work, would be to put the entire jacking mechanism of D14 onto the shaft of D10. Needless to say, this would only leave the skilled person with a poor copy of the invention of D14.

Neither would the skilled person be motivated to look in D14 for a solution, since D14 makes no mention of adjustable stepwise lowering.

However, even in the unlikely event that the skilled person would be able to incorporate isolated features from the mechanism of D14 into the device in D10 without performing any inventive work, features would still be lacking compared to the device of claim 1.

For example, even if the first and second lowering plates 44, 50 of D14 were considered to form a holding plate and a lowering plate respectively, and if the lowering actuation region 50b was considered to form a pushing lever, D14 does not disclose any hinge attachment connecting the pushing lever to the lowering plate.

Additionally, D14 fails to disclose any pivot structure which is connected to the second lowering actuation region 50b or to the first lowering plate 44, especially one which is arranged backward of a hinge attachment as required by feature 1.10.

Both D10 and D14 also fail to disclose that the lowering plate is lifted up and grips the jacking shaft when the pushing lever is pushed downwards. At D14 neither the second lowering plate 50 nor any other component is lifted when the second lowering actuation region 50b is pushed down.

Claim 1 is thus inventive over D10 when combined with D14.

5. *Dependent Claims*

5.1 Dependent Claim 2

Claim 2 defines that the rear end of the pushing lever and the release lever, is positioned beside each other for easy operation by the thumb of an operator.

Claim 2 is inventive over the prior art at least for the same reasons as given for Claim 1. Moreover, a combination of D14 with D1 would cause the skilled person to use the embodiment taught in paragraph [0020] of D14 where the second lowering actuating region 50b has the same length as the first lowering actuation region 44b to prevent the first lowering plate 44 from being accidentally activated, since D1 **teaches that the jack under all circumstances should prevent rapid and uncontrolled descent of the load** (column 1, lines 39-42). In this embodiment of D14, the first lowering actuation region 44b and the second lowering actuating region 50b are not positioned beside each other according to claim 2.

Hence, Claim 2 is inventive over the prior art.

5.2 Dependent Claim 3

Claim 3 defines that the pivot structure is moveable in the rear - front direction and/or in the up-down direction to regulate the distance of the downward movement of the frame.

Claim 3 is inventive over the prior art at least for the same reasons as given for Claim 1. Moreover, since none of D1, D10, D14 teaches a pivot structure that is movable to regulate the distance of the downward movement of a frame, no hypothetical combination of D1, D10, D14 can possibly end up within the terms of claim 1.

Hence, Claim 3 is inventive over the prior art.

6 Auxiliary claims

Merely as a precautionary means – in the unlikely event that the Patent cannot be maintained as granted – the Proprietor conditionally requests that Claim 1 as granted is amended by incorporation of the subject matter of Claim 2 as granted, as an Auxiliary request. The amended set of claims in marked-up and clean copies are attached as **Auxiliary request.**

By the conditional amendment, Claim 1 is further specified by incorporating the subject matter of Claim 2 as granted, i.e. by further specifying that:

“the rear end of the pushing lever (5) and the release lever (10), is positioned beside each other for easy operation by the thumb of an operator.”

The amendment constitutes a straight-forward, plain language further specification of the lowering mechanism, which specification is clear and concise. The amendment is further supported by paragraph [0015] of the description. Consequently, the amendment fulfils the requirements of Art 84 EPC.

The amendment constitutes a further limitation of Claim 1, whereby the amendment fulfils the requirement of Art 123(3) EPC.

Additionally, by the conditional amendment, Claim 1 has been amended to comprise the entire subject matter of Claim 2 of the Patent application as originally filed. The amendment *per se* as well as the subject matter of so amended entire Claim 1 is thus fully supported in the Patent application as filed. Thereby the amendment fulfils also the requirements of Art. 123(2) EPC.

The subject matter of the amended Claim 1 is novel and involves an inventive step over the prior art at hand for the same reasons as set out above. Since the amendment constitutes a limitation of the scope of the Claim, the so amended subject matter is even further distinguished from the prior art at hand.

Yours faithfully
Association No. 499

Zacco Norway AS