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**Datasheet for the decision
of 17 December 2020**

Case Number: T 1156/15 - 3.5.02

Application Number: 08157339.6

Publication Number: 2128882

IPC: H01H33/24

Language of the proceedings: EN

Title of invention:
High voltage circuit breaker

Patent Proprietor:
ABB Power Grids Switzerland AG

Opponent:
Siemens Aktiengesellschaft

Relevant legal provisions:
EPC Art. 100(a), 54, 56
RPBA Art. 13(1)
RPBA 2020 Art. 25(3)

Keyword:

Novelty - availability to the public of a product brochure
(yes) - distance ratios not directly and unambiguously
derivable from drawings and photographs

Inventive step - (yes)

Late filed objection of lack of inventive step - admitted (no)
- no justification for late filing and not conducive to
procedural economy



Beschwerdekammern

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Case Number: T 1156/15 - 3.5.02

D E C I S I O N
of Technical Board of Appeal 3.5.02
of 17 December 2020

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Decision under appeal: **Interlocutory decision of the Opposition
Division of the European Patent Office posted on
8 April 2015 concerning maintenance of the
European Patent No. 2128882 in amended form.**

Composition of the Board:

Chairman R. Lord
Members: F. Giesen
R. Cramer

Summary of Facts and Submissions

I. The present appeals by the patent proprietor and the opponent lie from the interlocutory decision of the Opposition Division of the European Patent Office posted on 8 April 2015 concerning maintenance of the European Patent No. 2128882 in amended form.

Since both parties are appellants they will be referred to as proprietor and opponent in this decision.

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

- D1 Prospectus "SF6-Leistungsschalter, Typ 3AT4/5, 362 kV bis 800 kV", Siemens AG
- D1.3 Modified side view of a current interrupter with annotated distances
- D1.5 Letter from Mr. Nogli, Siemens AG dated 16 April 1997
- D1.6 Cover photograph from D1 with annotated distances
- D1.7 List of current interrupters sold by the appellant, containing sites of deployment
- D2 "Hochspannungsschaltgeräte" in: "Schaltgeräte, Grundlagen, Aufbau und Wirkungsweise", editor M. Lindmayer, Springer Verlag, 1987, ISBN: 3-540-16706-4 and 0-387-16706-4, pages 208 to 211
- D2.1 Figure 4.35 of document D2 with annotated distances
- D3 DE U 80 34443, 27 May 1981
- D3.1 Figure 1 of document D3 with added distances

D12 US 3,288,955

III. Oral proceedings took place before the Board on 17 December 2020. The final requests of the parties were as follows:

The patent proprietor requested that the decision under appeal be set aside and the patent be maintained as granted (main request) or alternatively be maintained in amended form on the basis of the claims of one of the first to ninth auxiliary requests filed with their statement of grounds of appeal.

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

IV. Claim 3 as granted, i.e. according to the proprietor's main request, reads as follows:

"A high voltage live tank circuit breaker comprising:

- a support insulator (20);*
- at least one horizontally arranged elongated current interrupter (10) provided on said support insulator (20);*
- terminals (30) connected to the ends of said current interrupter;*
- a horizontally arranged elongated capacitor (50) and/or resistor (60) connected between the terminals in parallel with the current interrupter (10); and*
- at least one corona ring (50) arranged to at least partly surround one of the terminals, characterised in that*
- said corona ring (40) is arranged such that the*

vertical distance (d1) between the inner surface of the lower end of said corona ring and a center axis (10a, 50a, 60a) of said horizontally arranged elongated current interrupter (10), of said horizontally arranged elongated capacitor (50), or of said horizontally arranged elongated resistor (60), whichever being located lowest, is between about 1.5 and about 4 times shorter than the distance (d2) between the inner surface of the upper end of said corona ring and said center axis."

Claim 1 of the patent as granted reads as follows:

"A high voltage live tank circuit breaker comprising:

- a support insulator (20);*
- at least one horizontally arranged elongated current interrupter (10) provided on said support insulator (20);*
- terminals (30) connected to the ends of said current interrupter; and*
- at least one corona ring (40) arranged to at least partly surround one of the terminals, characterised in that said corona ring (40) is arranged such that the vertical distance (d1) between the inner surface of the lower end of said corona ring and a center axis (10a) of said horizontally arranged elongated current interrupter (10) is between about 1.5 and about 4 times shorter than the distance (d2) between the inner surface of the upper end of said corona ring and said center axis."*

Claim 2 and claims 4 to 11 are dependent claims.

In view of the tenor of this decision the wording of the auxiliary requests is not reproduced here.

- V. The opponent's arguments in so far as they are relevant for the present decision can be summarised as follows:

There was a high danger in maintaining *prima facie* invalid patents in the sector of energy supply within the European Union. The proprietor must have been aware that the subject-matter for which they had sought patent protection was already widely in use.

The claimed circuit breaker was not new in view of the product brochure D1. D1 had been made publicly available. D1.5 was a letter by Mr. Nogli announcing that the brochure D1, identified by its title and the order number E-50001-U113-A22-X-7400, which is also printed at the bottom of the last page of D1, was available to be ordered from the store LZF-Lager Fürth-Bislohe. D1.5 is dated 16 April 1997, which was the date of public availability. Document D1.7 showed a table of locations, the type of live tank circuit breakers deployed at the respective locations as well as, *inter alia*, quote and order dates. This document added credibility to the assertion that the corresponding brochure D1 had been made publicly available.

D1 furthermore disclosed all the technical features of claim 3 as granted. It was apparent from document D1 that the circuit breaker contained a current interrupter, a resistor and a capacitor. The photograph on the cover page as well as the side view drawing on page 3 entitled "The Construction, Der Aufbau" showed that the resistor was arranged lower than the current

interrupter and they also enabled distance ratios to be derived. The ratios derived from the photographs fell within the claimed range, which was shown by documents D1.3 and D1.6, which contain a modified side view and cover photograph of D1, respectively, with distance measurements added by the opponent.

Furthermore, the current interrupter of claim 3 was not new in view of that depicted in figure 4.35 of D2, which also enabled ratios of distances to be derived. D2 was not a patent, which usually contains schematic figures, but instead was a text book having the intention of showing what real current interrupters looked like. The figure was thus to scale. The ratios fell within the claimed range as shown in document D2.1, which contained distance measurements added by the opponent.

The current interrupter of claim 3 was also not new in view of that depicted in figure 1 of D3. Figure 1 allowed distance ratio measurements to be taken. The ratio of the distances from the resistor 6 or capacitor 7 to the lower horizontal bar 8 and to the parallel line going through the apex of the triangular corona ring fell within the claimed range as shown by document 3.1, which contained figure 1 of D3 with distance measurements and annotations added by the opponent.

The combination of features of claim 1 was disclosed in documents D12, D2 or D3. Figure 1 of D12 showed a current interrupter in an off-centre position. Taking measurements on this figure led to the distance ratio claimed. The remaining distinguishing features were disclosed in D2 or D3.

Furthermore, the circuit breaker according to claim 1 lacked an inventive step in view of D1 or D2 and the common knowledge of the skilled person. The only distinguishing feature was that the circuit breaker according to claim 1 as granted did not have a resistor or capacitor whereas those according to D1 or D2 did. The skilled person would, without involving an inventive step, leave out the resistor or capacitor.

The subject-matter of claim 3 did not involve an inventive step in view of D1 or D2 as closest prior art. The technical effect of improved withstand capability disclosed in the opposed patent was not achieved. According to technicians employed at the opponent's company, the off-centred arrangement rather served the purpose of giving access for tools. However, this had long been practiced as demonstrated by D1 or D2. This inventive step objection should be admitted despite being filed late. It was *prima facie* highly relevant. The proceedings up until the oral proceedings were focused on novelty and the opponent was convinced that the novelty objection would eventually succeed. The representative was appointed only shortly before the oral proceedings before the Board and had not been provided with information as to why the inventive step objection had not been filed earlier by his predecessors.

VI. The patent proprietor's arguments in so far as they are relevant for the present decision can be summarised as follows:

Document D1 did not belong to the state of the art for the circuit breaker according to claim 3. It was not clear whether D1 was ever made publicly available. It

was conceivable that it might have never left the company internal file repository and thus never have been distributed. The appropriate standard of proof was certainty beyond reasonable doubt because the product leaflet as well as the other submitted evidence originate from the opponent. This standard had not been met.

Furthermore, even assuming that the product brochure was publically available, the drawings in D1 were schematic and no distances or ratios could be derived from them directly and unambiguously. The photograph on the cover page of D1 was a perspective photograph. It was therefore also not possible to derive directly and unambiguously distance ratios from this picture.

Similarly to D1, document D2 only contained a schematic drawing, figure 4.35, from which no distance ratio could be derived. The preceding figure 4.34 showed a similar current interrupter with a table with different heights and widths, showing that also figure 4.35 was not to scale. The current interrupter of claim 3 was therefore also new in view of that of D2. Additionally no corona ring was disclosed in D2.

The subject-matter of claim 3 was new in view of document D3. According to D3, page 2, lines 24 to 26 figure 1 was schematic. Furthermore, in order to show that D2 anticipated the claimed subject-matter, the distance from the resistor or capacitor to the apex of the triangular corona element would have to be measured, rather than to a virtual line going through it. However, this distance was not derivable from figure 1 of D3 because figure 1 shows a perspective view.

The subject-matter of claim 1 involved an inventive step in view of the combination of D12, D2 and D3. D12 should not be admitted into the appeal proceedings. The skilled person would not combine D12, which does not disclose a live tank circuit breaker, but rather a disconnecting switch, with either D2 or D3.

The inventive step objections based on D1, D2 or D3 were an amendment to the opponent's appeal case. No justification for their late filing had been offered. They were *prima facie* not relevant because even taking into account the opponent's fresh case no document of the state of the art disclosed the claimed distance ratio. These objections should consequently not be admitted.

Reasons for the Decision

1. Admissibility of the Appeals

The appeals comply with the substantive and formal requirements and are therefore admissible.

2. Applicable Version of the Rules of Procedure

In the present case the statements of grounds of appeal and the reply by the patent proprietor were filed and summons were notified before 1 January 2020. The scheduled original date for oral proceedings could not be maintained and a new summons was sent to the parties after 1 January 2020.

According to Article 25(2) RPBA 2020, Article 12(4) RPBA 2007 applies to the statements of grounds of appeal and the replies. According to the Board it is immaterial for the application of Article 25(3) RPBA 2020 that further summons have been notified after the entry into force of the new Rules of Procedure merely replacing summons that were notified before that date. Therefore Article 13 RPBA 2007 is applicable as well.

3. Public Availability of D1

3.1 Document D1 is part of the state of the art according to Article 54(2) EPC.

3.2 D1 is a product brochure. D1 clearly addresses potential customers. On the first page it contains a description of the reliability and advantages of Siemens current interrupters and the expertise of Siemens in the field of current interrupters. This information is clearly irrelevant for Siemens internal employees but clearly belongs to marketing techniques of convincing potential customers. D1 further contains information on shipping, commissioning and erection. It mentions in particular that Siemens specialists can assist in erecting the current interrupters. This again is information only relevant for potential customers. Its contents are therefore clearly addressed to potential customers interested in buying the product. In addition to the content, D1 bears on the last page at the bottom the warning "Subject to change without prior notice". Such legal advice is also an indication that the purpose of this document is to inform the public and not just Siemens internal employees. In accordance with the case law of the boards of appeal,

the Board considers that the balance of probabilities is the correct standard of proof for the public availability of a product or advertising brochure, see for example Case Law of the Boards of Appeal of the European Patent Office, Ninth Edition, July 2019, I.C. 3.2.1 c). This is because this type of document is inherently destined to be distributed to potential customers and interested persons with the express aim of making them aware of the product the brochure advertises.

The proprietor argued that D1 was not an advertising brochure, but a product description (D1.5 refers to D1 as a "Produktschrift") and that the correct standard of proof according to the Case Law (*loc. cit.*) I.C.3.2.1 a) and b) was therefore a proof beyond reasonable doubt. Whether a document is to be considered an advertising brochure or not has to be decided by its form and content rather than by its designation. It also has to be judged on a case-by-case basis. The content and form, and the way it is worded, as well as the choice of photographs show rather clearly that the purpose of D1 is to make potential customers aware of the product. Therefore, the proprietor's argument did not convince the Board.

3.3 The opponent presented document D1.5, a company internal letter ("An Verteiler") announcing that the product brochure, identified by order number E-50001-U113-A22-X-7400, was available as of 16 April 1997 for ordering from a company internal file repository. Document D1, the brochure itself, bears the same order number at the bottom of its last page. There is thus a clear link between the internal letter D1.5 and the product brochure D1, contrary to the proprietor's assertion. The fact that employees at Siemens were

informed eleven years before the filing date of the opposed patent that a product brochure destined to be distributed to inform interested specialists and potential customers of the product could be ordered makes it highly probable that this brochure was indeed publicly available before the filing date of the opposed patent. The normal course of events would be that employees of the opponent concerned with sales and marketing would distribute the brochure to potential customers immediately after its release for publication. The opponent added to the credibility of his assertion by arguing that the product advertised in this brochure, the high-voltage live tank current interrupter type 3AT4/5, had been sold by the opponent for a long time before the release of D1. This is consistent with the information in D1.5 that the brochure contained updated data and was amended to conform to a certain layout, implying that it had existed before in a different layout. Furthermore, the opponent submitted that the same type of current interrupter as shown in the side view on page 3 of D1 was already disclosed in figure 4.35 of D2, a textbook from 1987, i.e. ten years before the amended brochure. To the Board the fact that the current interrupter advertised in D1 is a product which has obviously been on the market for a long time adds to the high probability that D1 itself was also publicly available. Furthermore, the opponent submitted document D1.7, which contains a list of locations at which live tank circuit breakers of the type 3AT4/5 were erected. The opponent argued that live tank circuit breakers were erected in the open and fenced-off, but that they could be observed from a distance allowing details such as the corona ring to be recognised. While the Board was unable to verify this claim by the opponent, there is no reason to presume that it was false. The opponent's

claim is at least verifiable and as such at least adds, albeit weakly, to the probability that the brochure D1 was publicly available.

The proprietor's argument that the product brochure may never have left the store identified in D1.5 does not convince the Board. This scenario is one conceivable course of events, but an extremely unlikely one, which cannot tip the balance of probabilities in the proprietor's favour. The proprietor also argued that there was no evidence that the content of D1 as presented in appeal proceedings was the same as that which may have been made publicly available. The Board is not convinced by this doubt. The opponent convincingly argued that a different version of the brochure D1 would have received a different order number, as also happened in the present case due to a layout change as evidenced by D1.5. The further arguments adduced by the proprietor assume a different standard of proof, which does not apply to D1. In particular, the presumption of a confidentiality agreement in the case of a product brochure destined for advertising is not justified.

4. Novelty in View of D1

4.1 The subject-matter of claim 3 as granted is new in view of D1 within the meaning of Articles 100(a) and 54 EPC.

4.2 Admissibility of D1.6

The Board admits document D1.6 pursuant to Article 13(1) RPBA 2007. It was filed only one month before the date of the oral proceedings before the Board and is therefore an amendment to the opponent's appeal case.

However, it merely contains a reproduction of the cover photograph of D1 with annotated distances from the resistor centre to the corona ring inner surfaces added by the opponent with a graphics computer program. It is therefore helpful for the discussion of novelty and additionally does not introduce surprising facts into the proceedings because the fact that the distance ratio fell within the claimed range had been maintained by the opponent from the beginning of the opposition proceedings.

- 4.3 The feature concerning the ratio of distances from the centre of the lowest lying element, e.g. the resistor or capacitor, and the upper and lower inner surfaces of the corona ring as claimed is not directly and unambiguously derivable from D1.

D1 contains on its cover page a perspective photograph of the corona ring, a current interrupter, a capacitor and a resistor. In general, a perspective photograph does not allow measurements of distance ratios to be taken unless the relative position of the observer is known. Distances further away from the observer, such as the vertical distance between the centre of the resistor and the upper corona ring inner surface, will be observed under a smaller angle than distances closer to the observer, such as the vertical distance from the centre of the resistor to the lower corona ring inner surface, thus influencing the apparent distance ratio. Furthermore, it appears from the picture that the end faces of the capacitor and resistor, the lower lying horizontal cylindrical elements in the picture, are not exactly in the same plane as the race-track shaped corona ring. This can be inferred from the fact that the left circular front face is in the shadow of the corona ring. Furthermore, in D1.6, which is a better

quality version of the picture, a further shadow produced by the right vertical bar going from the lower to the upper corona ring straight sections can be seen. This effect will also have an influence on the apparent distances to the upper and lower corona ring surfaces when the picture is tilted. In the case in question it will make the vertical distance to the lower corona ring surface appear shorter and that to the upper corona ring surface longer. The Board is not sure that these errors can be quantified without knowledge of the relative position of the observer and the object of the picture. In any case, the burden of proving their assertion lies with the opponent, who has not submitted any estimate of the errors that occur due to the above mentioned effects and how they propagate into the ratio calculated on the basis of the distances measured on the photograph. In order to be novelty-destroying, the disclosure in a document has to be direct and unambiguous. This high standard is not met by the photograph on the cover of D1 because it is not possible to infer the distance ratio with the required certainty.

The opponent's argument that in order to fulfil its purpose of shielding, the end faces of the resistor and capacitor had to be surrounded by the corona ring is certainly correct but this does not mean that they have to lie exactly in the centre plane of the corona ring, which itself has a certain thickness. The shadows in the picture of D1 and D1.6 clearly indicate a certain, albeit small, distance from the centre plane of the corona ring. The opponent further argued that the effects of distortion due to the perspective were small, which could be seen from the near parallel straight sections of the race-track shaped corona ring. This again is certainly a reasonable observation.

However, the salient point here is that the standard for judging novelty is that features must be directly and unambiguously derivable. If the error is not quantifiable on the basis of the disclosure, then this criterion is not met.

D1 furthermore contains a side view drawing on page 3 showing a live tank circuit breaker. It is not clear whether this is a drawing which is to scale or whether it is schematic. The opponent is correct in pointing out that the drawing contains a lot of detail such as screws or insulator disks. In the Board's view, this drawing clearly represents a side view, rather than an undefined combination of side view and perspective view as argued by the proprietor. However, the opponent argued that the high voltage circuit interrupters according to D1 were in fact individually manufactured and not all the same, i.e. not standard products. The Board notes that the shape of the corona rings cannot be discerned in the side view drawing on page 3. It is reasonable and consistent to assume that they have all the same race-track shape as that shown on the front page photograph, but this is not enough for assessing whether the shape of the corona rings is directly and unambiguously derivable. The Board notes that the current interrupter on the front page has a dome shaped element protruding from the corona ring attached to it, which is not shown in the side view on page 3. Furthermore, in the side view two current interrupter units are depicted and appear to be aligned on the same centre axis, due to the fact that they are mounted on the same platform. In the photograph on the other hand, the two interrupter units are clearly offset and not on the same centre line. They share one wide race-track shaped corona ring, whereas in the side view on page 3 two distinct corona rings are depicted.

There are thus some pointers toward the figure on page 3 being a scale drawing and other pointers to the figure on page 3 being a detailed, but schematic drawing. Taking measurements of the distance ratio from that drawing furthermore rests on the assumption that the shape of the corona rings is the same as shown on the cover page, although there are clear discrepancies between the two figures.

In addition to these doubts, the proprietor argued in their statement of grounds that the measurement inaccuracy did not allow it to be concluded that the distance ratio fell in the claimed range, albeit in regard to figure 4.35 of D2. However, this figure is essentially identical to the figure on page 3 in D1. The opponent has not provided any estimate of the measurement errors and how they would propagate to the calculation of the distance ratio.

The Board considers that there remain significant doubts that distance ratios can be directly and unambiguously derived from the figure on page 3 of D1.

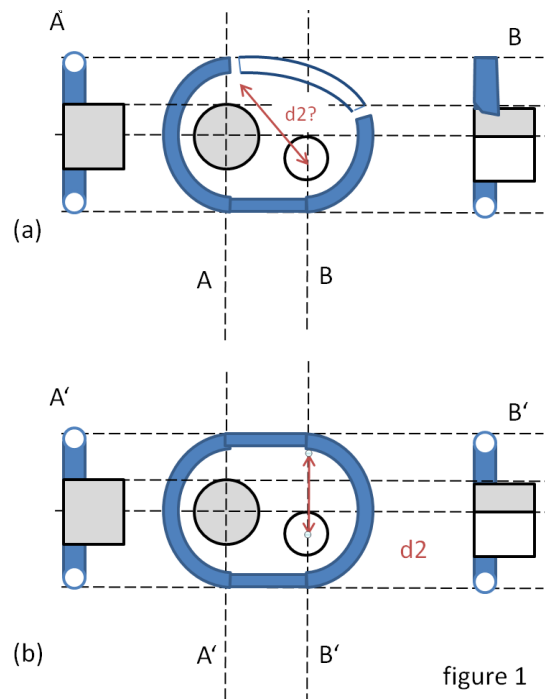
Given that the objection of lack of novelty is against the claim as granted and that the evidence comes mainly from the sphere of influence of the opponent, and given that the opponent was clearly made aware of the proprietor's and the Board's doubts at the latest with the Board's communication under Article 15(1) RPBA, yet has not provided further evidence, the Board considers that in case of doubt the issue has to be decided in favour of the proprietor.

5. Novelty in View of D2

5.1 The subject-matter of claim 3 as granted is new in view of D2 within the meaning of Articles 100(a) and 54 EPC.

5.2 D2 shows a side view of a current interrupter. The Board had already pointed out in the summons that in this side view the shape of the corona rings could not be determined with certainty. In particular, a race-track shape of the corona rings does not follow directly and unambiguously from D2.

In order to demonstrate this point, the Board prepared figure 1 on the right and notified it to the parties in their communication pursuant to Article 15(1) RPBA. The upper panel shows that on the basis of the information derivable directly and unambiguously from figure 4.35 of D2, the shape of the corona rings could be as depicted in panel (a).



The opponent assumes (tacitly) that the shape was a race-track shape as depicted in panel (b). This is, however, only one of several possibilities and is based on the assumption that the line of cut was not a straight vertical line. The exact shape of the part in panel (a) that is not solidly filled cannot be inferred from the figure.

The Board emphasises that while the figures in D2 and D1 are very similar, for the assessment of novelty, the two documents have to be considered separately because they were adduced as separate novelty-destroying disclosures. A race-track shape of the corona rings is not directly and unambiguously derivable from D2 alone and may also not be inferred having recourse to D1. Figure 1, panel (a) demonstrates that, if the shape of the corona ring is not derivable, the same holds true for the distance (d2) between the inner surface of the upper end of said corona ring and said centre axis, as is required by claim 3. It is also important to differentiate between document D2 being adduced as novelty-destroying disclosure and a certain product being adduced as a novelty-destroying prior use with D2 as indirect evidence of the features of that product. The opponent has clearly adduced D2 as a novelty-destroying disclosure. Thus the claimed subject-matter has to be derivable from D2 alone, which is not possible in a direct and unambiguous manner in the present case.

6. Novelty in View of D3

6.1 The subject-matter of claim 3 as granted is new in view of Document D3 within the meaning of Articles 100(a) and 54 EPC.

6.2 The Board agrees with the proprietor's argument in their statement of grounds of appeal on page 16 that D3 explicitly discloses on page 2, lines 24 to 26 that figure 1 is a schematic figure. No distances or distance ratios can therefore be derived from it.

Furthermore, claim 3 as granted requires that the first distance (d1) is "*shorter than the distance (d2) between the inner surface of the upper end of said corona ring and said center axis*". The Board agrees with the proprietor that the wording of claim 3 requires that the distance d2 in D3 goes from the centre axis of the lowest element to the inner surface of the apex of the triangular corona shield. The vertical distance going upward from the resistor/capacitor to a virtual line parallel to the lower horizontal bar and going through the apex is not a distance to an inner surface of the corona ring as required by claim 3 as granted. Hence, the distance from the resistor/capacitor centre to the apex of the triangular corona ring is not directly and unambiguously derivable from the perspective figure 1 of D3, not even under the (incorrect) assumption that this figure was to scale.

7. Inventive Step in View of D12 and D2 or D3

7.1 The subject-matter of claim 1 as granted involves an inventive step in view of D12 in combination with either D2 or D3 within the meaning of Articles 100(a) and 56 EPC.

7.2 Document D12 has been admitted by the Opposition Division and has been referred to in the decision under appeal. It is therefore in the proceedings.

Even assuming *arguendo* that a skilled person would combine document D12, which does not show a high voltage live tank circuit breaker as the opponent themselves point out, with documents D2 or D3, the opponent fails to explain how distance ratios could be

derived directly and unambiguously from the figures of D12. The terminal within the meaning of claim 1 is to be seen in co-operating jaw contact 102. It appears that the opponent's measurements were taken from figure 1 of D12 from the element bearing the reference sign "45, 102". Figure 1b shows a side view of the same corona rings and the terminal 102. In this figure, however, the jaw contact 102 appears to be shown to lie on the horizontal centre line of the corona rings. It follows that the drawings are clearly schematic in nature and the distance from the terminal centre axis to any parts of the corona ring cannot be derived directly and unambiguously.

Since the distance ratio is also not disclosed in D3 or D2, as has been shown above, the subject-matter of claim 1 as granted is not rendered obvious by the combination of the three documents.

8. Inventive Step in View of D1 and D2
 - 8.1 The subject-matter of claim 1 as granted involves an inventive step in view of D1 or D2 as closest prior art.
 - 8.2 The opponent's objection of lack of inventive step against the subject-matter of claim 1 as granted in view of D1 or D2 was raised for the first time in their letter dated 17 November 2020. It is therefore an amendment to the opponent's appeal case and as such its admittance is at the discretion of the Board.
 - 8.3 However, a decision on its admissibility was not necessary.

The Board had to decide on the novelty of the subject-matter of claim 3 as granted in view of D1 and D2, see points 4 and 5 above. This involved a decision on the question whether a distance ratio was directly and unambiguously derivable from either document. Claim 1 as granted is also limited to the distance ratio but measured from the centre of the current interrupter. The opponent's objection of lack of inventive step against claim 1 based on these two documents rests on the assumption that the only distinguishing feature of claim 1 was the absence of a capacitor and a resistor, and thus that the distance ratio was not a distinguishing feature.

It follows necessarily from the Board's decision that no distance ratio is derivable from D1 or D2 that the objection of lack of inventive step against the subject-matter of claim 1 in view of either D1 or D2 cannot be successful either.

A further discussion on the admissibility and the substance of this objection was also not necessary at the oral proceedings. The opponent had already been heard extensively on the question whether any distance ratio was derivable from D1 or D2. Despite being asked on several separate occasions whether there were further objections, in particular after the conclusion on novelty had been given during oral proceedings and before the chairman closed the debate, the opponent did not request a discussion of this particular objection and therefore relied on their written submissions alone.

9. Admissibility of further Objections of Lack of Inventive Step

9.1 The objections relating to inventive step against the subject-matter of claim 3 as granted based on D3, D1 or D2 as closest prior art, raised by the opponent for the first time at the oral proceedings before the Board, are further amendments to the opponent's appeal case. They are not admitted pursuant to Article 13(1) RPBA 2007.

9.2 The objections of lack of inventive step against claim 3 as granted based on D3, D1 or D2 are an amendment to the opponent's appeal case since they were not filed with the statement of grounds of appeal. Furthermore the opponent did not file a reply to the proprietor's statement of grounds of appeal, which contained a request to maintain the patent as granted.

9.3 The amendment is not admitted. The opponent argued that their objection should be admitted because it was *prima facie* relevant. Since they were convinced that their novelty objection would eventually succeed they did not consider it necessary to raise the inventive step objection earlier. The opponent's representative added that he was appointed only after the summons to oral proceedings before the Board had been notified and that he could not explain why his predecessors had not raised the objection earlier.

Neither the opponent's letter dated 17 November 2020 nor the the opponent's case presented during the oral proceedings contained any evidence supporting the alleged alternative technical effect of accessibility of tools. On the basis of the opponent's submission, in dealing with the very late filed objection, the Board

could only have taken for granted the opponent's assertion. This renders the objections less relevant than the opponent argues them to be and admitting them therefore would not have served the need for procedural economy. Furthermore, while exceptional circumstances might justify the admission of late filed objections, the Board could not recognise any such exceptional circumstances in the present case. A party can clearly not rely on the conviction that a particular objection will eventually succeed as a justification for presenting an incomplete appeal case. In this context, the Board notes that two other objections relating to inventive step were in fact presented in the opponent's statement of grounds of appeal and in their letter dated 17 November 2020, which casts doubt on the opponent's argument that they did not consider it necessary to raise further objections beyond novelty. Also the appointment of a new representative before the oral proceedings before the Board cannot serve as a justification for new objections.

10. Conclusion

The subject-matter of claims 1 and 3 is new over each of D1, D2 and D3. Furthermore, it involves an inventive step in view of D12 with D2 or D3. Further objections of lack of inventive step against claim 1 and claim 3 based on D1, D2, and D3 were not admitted into the proceedings. Therefore, no ground for opposition prejudices the maintenance of the opposed patent (Article 101(2) EPC). The Board therefore accedes to the proprietor's main request.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The patent is maintained as granted.

The Registrar:

The Chairman:



U. Bultmann

R. Lord

Decision electronically authenticated