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**Datasheet for the decision
of 13 September 2018**

Case Number: T 0346/15 - 3.4.03

Application Number: 06812715.8

Publication Number: 1938298

IPC: G09F13/04, G09F13/14,
G02F1/13357, E04B9/00

Language of the proceedings: EN

Title of invention:
DISPLAY DEVICE

Patent Proprietor:
Koninklijke Philips N.V.

Opponents:
CARALUX LED- und Neonlichttechnik GmbH

Headword:

Relevant legal provisions:
EPC 1973 Art. 54, 56, 100(a), 100(b), 100(c)
EPC Art. 52(1), 123(2)
EPC R. 80, 100(1)
RPBA Art. 15(1), 12(4)

Keyword:

Amendments - added subject-matter (yes)
Amendment occasioned by ground for opposition - (no)
Novelty - auxiliary request (yes)
Inventive step - auxiliary request (yes)
Sufficiency of disclosure - (yes)
Late-filed document
Observations by third parties - admissibility of a new
document (no)

Decisions cited:

G 0003/14, T 0637/09

Catchword:



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Case Number: T 0346/15 - 3.4.03

D E C I S I O N
of Technical Board of Appeal 3.4.03
of 13 September 2018

Appellant: CARALUX LED- und Neonlichttechnik GmbH
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Decision under appeal: **Decision of the Opposition Division of the
European Patent Office posted on 9 December 2014
rejecting the opposition filed against European
patent No. 1938298 pursuant to Article 101(2)
EPC.**

Composition of the Board:

Chairman G. Eliasson
Members: S. Ward
C. Schmidt

Summary of Facts and Submissions

I. This is an appeal against the decision of the Opposition Division rejecting the opposition against European patent EP 1 938 298.

II. In the notice of opposition filed by opponent 1 (DAMBACH-Werke GmbH) the patent was opposed in its entirety on the grounds of lack of inventive step (Article 100(a) in combination with Articles 52(1) and 56 EPC) and insufficiency of disclosure (Article 100(b) EPC).

In the notice of opposition filed by opponent 2 (CARALUX LED- und Neonlichttechnik GmbH) the patent was opposed in its entirety on the grounds of lack of novelty (Article 100(a) in combination with Articles 52(1) and 54 EPC), lack of inventive step (Article 100(a) in combination with Articles 52(1) and 56 EPC), insufficiency of disclosure (Article 100(b) EPC) and extension of subject-matter beyond the content of the application as filed (Article 100(c) EPC).

The opposition of opponent 1 was withdrawn during the proceedings before the department of first instance. This has no immediate procedural significance, since the opposition of opponent 2 remains.

III. At the oral proceedings held before the Board the appellant (opponent 2, hereinafter, "the opponent") requested that the decision under appeal be set aside and that the European patent be revoked; the respondent (proprietor, hereinafter, "the proprietor") requested that the appeal be dismissed (main request) or that the patent be maintained on the basis of one of the

auxiliary requests I to VI, filed with letter dated 13 August 2018.

IV. The following documents are referred to in this decision:

- D2: WO 00/65277 A
- D23: Excerpt from the online dictionary "duden.de" on the definition of "Lichtquelle"
- D24: Excerpt from "Meyers Enzyklopädischem Lexikon in 25. Banden", 9th Ed., 1975, Volume 15, pages 73-74 on "Lichtquelle"
- D25: Konica Minolta C&A Application Note No. 1 "Light sources and illuminants"
- D26: Excerpt from Trishna's "The IIT Foundation series, Physics", page 196, Pearson, 2012
- D27: Excerpt from the online dictionary "WordWeb Online" on the definition of "light source"
- D28: US 6 026 602 A
- D29: WO 2004/093611 A1
- D32: DE 44 42 351 A1
- D34: WO 03/029723 A2 (DE 602 21 434 T2, the German translation of the corresponding European patent, is also referred to).

V. Claim 1 of the main request (i.e. claim 1 as granted) reads as follows (reference numbers used in the contested decision and by the parties are shown in square brackets):

"[1.1] Display device (1, 8, 19, 21, 22, 125) such as a light box, for instance for an illuminated

advertisement, a traffic sign, a signpost, an illuminated ceiling, a TFT screen, an LCD screen, a dial for a clock or a measuring instrument, which device comprises:

[1.2] a housing (2);

[1.3] a light source (3, 4, 5, 9, 10, 11, 12, 13, 14, 20, 23, 26, 27, 43) accommodated in this housing; and

[1.4] at least one diffusely translucent display face (6, 7, 33, 42) illuminated by the light from this light source;

[1.5] orienting means (14) are added to the light source so as to obtain a directional characteristic of the light emitted by the light source such that the light source directly illuminates at least one wall (18, 28) almost exclusively, for instance for more than 75%; and

[1.6] this at least one wall is diffusely reflective such that a part of the light incident thereon is reflected to the display face,

characterized in that

[1.7] the at least one wall extends at least more or less in transverse direction relative to the display face, and

[1.8] the at least one wall is opposite to a wall on which the light source is arranged."

Claim 15 of the main request reads as follows:

"Display device as claimed in any of the foregoing claims, wherein the directional characteristic of the light emitted by the light source has an aperture angle of about 4°, in a direction transverse to a longitudinal direction of the opposite wall."

The claims of auxiliary request I correspond to those of the main request, with claim 15 deleted.

VI. With the summons to oral proceedings, the Board sent the parties a communication under Article 15(1) RPBA setting out its provisional views.

VII. The opponent's arguments, in so far as they are relevant to the present decision, were essentially as follows:

(a) Claim 1 of the main request did not meet the requirements of Article 100(c)/Article 123(2) EPC due to the presence of the feature 1.8, i.e. "the at least one wall is opposite to a wall on which the light source is arranged". Although this feature was disclosed in the drawings, for example in Fig. 4, it was only disclosed in combination with a plurality of other features, in particular:

- only a single inner wall was illuminated;
- the illumination was by means of LEDs;
- the LEDs were arranged in a row;
- the LEDs were arranged to be equidistant from each other;
- there were only three LEDs;
- the housing walls were arranged perpendicularly to each other;
- the LEDs had concrete aperture angles; and
- these concrete angles were achieved with lens means.

Where features were based on drawings, it was not permissible to introduce isolated features into a claim without other features derivable from the drawings.

The proprietor had accepted that the feature in claim 15 that the emitted light had an aperture angle in the transverse direction of "about 4°" could only be based on the passages describing Fig. 4, in which this feature was disclosed only in combination with an aperture angle in the longitudinal direction of about 25°, so that claim 15 of the main request did not meet the requirements of Article 123(2) EPC.

(b) The requirements of Article 100(b) EPC were not met. According to claim 1, orienting means produced a directional characteristic of the light such that it directly illuminated at least one wall almost exclusively. From this it was not clear what amount of light was to fall on this wall. The example of 75% did not limit the claimed subject-matter.

Moreover, the skilled person would not, on the basis of the description of the patent, be in a position to determine the percentage of light from the source falling on the opposite wall of the device, since no suitable measuring method was set out in the opposed patent.

The features of the characterising part of claim 1 were unintelligible, and the skilled person would not find in the description of the patent a clear indication of which geometrical arrangement was intended.

(c) Objections under Article 100(a) EPC arose, as the claimed subject-matter lacked novelty over any of D2, D28 and D29, and lacked inventive step over the

combination of D2 and common general knowledge or the combination of D32 and common general knowledge.

The Opposition Division was incorrect to suggest that D2 did not disclose features 1.3, 1.5 and 1.8 of claim 1 of the main request. The side emitting fiber 20 of D2 was also a light source by virtue of emitting light, and was located within the housing, hence feature 1.3 was disclosed. The side emitting fiber also comprised orienting means ensuring a narrow emitting angle (5° to 20°) with light travelling in a direction generally parallel to the sign face, thus features 1.5 and 1.8 were disclosed.

In D28 the LEDs illuminated almost exclusively one wall (reflector plate 14), which at least partially extended in a more or less transverse direction to the display face (Figs. 2 and 7), and opposite the wall on which the light source was arranged.

In D29 (e.g. Fig. 2) the LEDs illuminated almost exclusively one wall (diffuse reflector 216), which was in a more or less transverse direction to the display face (decorative frame 212), and opposite the wall on which the light source was arranged.

Even if the side emitting fiber 20 of D2 was not regarded as a light source, no inventive step could be recognised starting from this document. This would be the sole difference, and the problem would be to provide an alternative suitable light source plus orienting means, and many such sources were known to the skilled person at the filing date of the opposed patent.

Moreover, document D32 disclosed a light box from which claim 1 of the main request differed only in that the at least one wall was diffusely reflective, whereas in D32 the corresponding features (19a/19b) were general reflectors. Both diffuse and specular reflectors would be known to the skilled person, and no inventive step would be involved in selecting the diffuse alternative.

(d) The documents D23-D27 should be admitted into the proceedings as they merely clarified the definition of the term "light source" which the Opposition Division had misinterpreted in relation to document D2.

The documents D28, D29 and D32 should be admitted into the proceedings as they were filed in response to the Opposition Division's surprising interpretation of the term "light source". D28 and D29 were *prima facie* relevant in relation to novelty, and D32 was *prima facie* relevant in relation to inventive step.

(e) The embodiments depicted in Figs. 9C and 10 were not part of the invention, as acknowledged by the proprietor. The description of the patent should therefore be amended to clarify this.

VIII. The proprietor's arguments, in so far as they are relevant to the present decision, were essentially as follows:

(a) Regarding the objections under Article 100(c) EPC, feature 1.8 could be derived directly and unambiguously from the original application as a whole, and in particular from the exemplary embodiments of Figs. 4 to 7, 9A and 19A, which each showed an arrangement corresponding to that of claim 1. With respect to Fig.

19A, the opposite arrangement of the at least one wall was even explicitly mentioned.

Feature 1.8 was also not functionally related or inextricably linked to the other features of the embodiments. The application did not teach that the light source had to be an arrangement of equidistant LEDs. Moreover, the application clearly taught that the aperture angles were chosen according to the dimensions of the housing.

Concerning claim 15 of the main request, the application did not imply any functional interrelation between the aperture angles in the longitudinal and transverse direction. The application explicitly taught a functional interrelation between the dimensioning of the housing in the longitudinal and transverse directions and the respective longitudinal and transverse aperture angles. From this teaching, the skilled reader understood that the aperture angle in the longitudinal direction had to be selected in accordance with a length (i.e. the dimension of the housing in the longitudinal direction), and the aperture angle in the transverse direction had to be selected in accordance with the width (i.e. the dimension of the housing in the transverse direction).

Including a transverse aperture angle of about 4° while omitting a longitudinal aperture angle of about 25° did not therefore constitute an intermediate generalisation.

(b) The subject-matter of claim 1 of the main request was novel over D2. The Opposition Division was correct to conclude that D2 did not disclose a light source in the housing (feature 1.3). The term "light source" was

limited to a device actually generating light, such as a lamp or light emitting element, and D2 disclosed only an external light source supplying light to the fibre. Features 1.5 and 1.8 were therefore also not disclosed.

Even if the fibre in D2 were considered a light source, the chief target surface for the light was the back surface, and thus D2 did not disclose orienting means which achieved an almost exclusive illumination of the wall opposite that on which the light source was arranged. Furthermore, D2 did not disclose orienting means which were "added to" the light source, as claimed.

Starting from D2, claim 1 of the main request was inventive, since D2 explicitly required that the light source was provided outside the housing, in order to achieve its objective. Thus, providing the light source inside the housing would undo the achievements of document D2. Moreover, the skilled person would not depart from the clear teaching of D2, which was to direct the light chiefly towards the back surface.

(d) There was no insufficiency of disclosure. Methods for measuring the light directly incident on the at least one wall would form part of the common knowledge of the skilled person. The other objections related not to sufficiency of disclosure, but to an alleged lack of clarity.

(e) None of the documents which were filed in appeal should be admitted into the proceedings. It was a misuse of the appeal procedure to attempt to obtain a "second try" by filing a new set of documents, merely because the first set hadn't been successful. In the written procedure, no reason for the late filing had

been given, and those documents on which new novelty or inventive step attacks were based (D28, D29, D32 and D34) were not *prima facie* relevant.

- IX. Third party observations pursuant to Article 115 EPC 1973 were filed, referring to a document (DE 602 21 434 T2) which was given the label D34. In the present decision the Board uses the label D34 to refer to the corresponding PCT application (WO 03/029723 A2), which was published before the priority date of the present application.

The arguments of the third party, in so far as they are relevant to the present decision, were essentially as follows:

D34 disclosed a display having a housing, a light source and orientation means 15 such that light passing through the material 15 travelled preferentially in a direction parallel to the major surfaces of the display, thereby being incident almost exclusively on wall 8. Wall 8, which had a reflecting surface which could be diffusely scattering, extended transversely and opposite to the wall on which the light source was mounted. Claim 1 was therefore not novel.

Reasons for the Decision

1. The appeal is admissible.
2. *Main Request: Objections under Article 100(c) EPC 1973/ Article 123(2) EPC*

2.1 Claim 1 is based primarily on the combination of original claims 1 and 12 as filed. These claims define a display device comprising *inter alia* a light source and orienting means, such that the light source directly and almost exclusively illuminates at least one diffusely reflective wall extending in a transverse direction relative to a translucent display face.

2.2 The only feature of claim 1 which is not derived from the originally filed claims is feature 1.8, namely that "the at least one wall is opposite to a wall on which the light source is arranged". It is this feature which is the focus of the allegation of non-compliance with the requirements of Article 123(2) EPC.

While the opponent does not deny that feature 1.8 is disclosed *per se* in the application, for example in Fig. 4, it is argued that this feature has been extracted in isolation, while failing to import into the claim other features disclosed in combination with it in this drawing.

2.3 The disclosed embodiments having the feature of original claim 12 (the wall or walls which are almost exclusively illuminated being *transverse* to the display face) are those of Figs. 4 to 7, 9A and 19A. It is noticeable that all of these embodiments also comprise feature 1.8 (the transverse wall or walls are arranged *opposite* to the light source). There is no example of any other transverse wall (e.g. a side wall) being directly illuminated, let alone almost exclusively illuminated. While not in itself conclusive, this is, in the opinion of the Board, a first indication that this combination of features belongs to the general teaching of the application as filed.

2.4 Moreover, in the arrangement depicted in Fig. 4, the light source comprises a row of LEDs, and lens means are provided with longitudinal and transverse aperture angles of about 25° and 4° with respect to the "opposite top wall 18". According to the final paragraph on page 15:

"This choice and the dimensioning of the housing achieves that it is practically only the inner surface of top wall 18 that is illuminated more or less homogeneously by LEDs 20".

From the use of the word "achieves", a skilled reader would understand that the aim is to illuminate (as far as possible) only the wall which is opposite to that on which the light source is mounted, and that the disclosed choices of light source, lens means and housing dimensions represent the means by which this aim is achieved according to this embodiment.

2.5 Other ways of achieving this aim are depicted in Figs. 5 to 7, 9A and 19A, and it would be immediately apparent to a person skilled in illumination engineering that the aim of directing light to be incident essentially exclusively on the opposite wall(s) could be achieved by many other combinations of light sources, optical means and housing dimensions.

2.6 From the group of embodiments disclosed in Figs. 4 to 7, 9A and 19A, the skilled reader would, in the opinion of the Board, derive the general teaching that where the wall to be almost exclusively illuminated is transverse to the display face, it should also be a wall (or walls) situated opposite a wall (or walls) on which the light source is arranged.

2.7 As a result, the incorporation into claim 1 of feature 1.8 does not result in subject-matter which extends beyond the content of the application as filed, and hence claim 1 of the main request complies with the requirements of Article 123(2) EPC.

2.8 According to claim 15, the directional characteristic of the light emitted by the light source has an aperture angle of about 4° in a direction transverse to the longitudinal direction of the opposite wall".

As accepted by the proprietor, the only possible basis for this feature is in the passages describing Fig. 4 (final passage on page 15; second paragraph on page 16) in which a lens means is disclosed having an aperture angle of about 4° in the transverse direction and about 25° in the longitudinal direction. The proprietor argued that a transverse aperture angle of about 4° could be claimed without limiting the subject-matter to a longitudinal aperture angle of about 25° as these two features were not functionally related.

2.9 Where an amendment isolates one or more features from a set of features originally disclosed in combination, one criterion which is regularly applied in judging compliance with the requirements of Article 123(2) EPC is whether any clearly recognisable functional or structural relationship exists between the features incorporated into the claim and those omitted (*Case Law of the Boards of Appeal of the European Patent Office, 8th edition, 2016, II.E.1.7*).

2.10 In the present case, in the arrangement of Fig. 4, selecting an aperture angle in the transverse direction of about 4° (in combination with a suitable choice of light source placement and housing dimensions) has the

function of ensuring that the light is incident on the opposite wall and not on the front and back surfaces (6 and 7). Similarly, selecting an aperture angle in the longitudinal direction of about 25° (again, in combination with a suitable choice of light source placement and housing dimensions) has the function of ensuring that the light is incident on the opposite wall and not on the side walls.

2.11 Thus, contrary to the position of the proprietor, these two aperture angles are functionally related, in that they both contribute to the aim explicitly disclosed in the description (page 5, last paragraph) of achieving "that it is practically only the inner surface of top wall 18 that is illuminated more or less homogeneously by LEDs".

2.12 The Board therefore finds that claim 15 defines subject-matter at a level of generality not originally disclosed and hence does not meet the requirements of Article 123(2) EPC. Consequently, the patent cannot be maintained on the basis of the main request.

3. *Auxiliary Request I: Admission and Article 123(2) EPC*

3.1 Compared to the main request, the sole amendment to auxiliary request I is the deletion of dependent claim 15, and the opponent did not raise any objection to this request I being admitted into the proceedings. The Board therefore sees no reason not to admit this request.

3.2 The only claim of the main request which the Board found not to comply with the requirements of Article 123(2) EPC has been excised from auxiliary request I,

and hence this request meets the requirements of Article 123(2) EPC.

4. *Objection under Article 100(b) EPC 1973*

4.1 In its communication pursuant to Article 15(1) RPBA, the Board stated its provisional opinion that the skilled worker in the field of illumination would be well able to determine the percentage of light from the source falling on the opposite wall of the device, and that the remainder of the opponent's objections on this ground appeared to relate more to objections of lack of clarity (Article 84 EPC 1973). As the features to which these objections were directed were present in claim 1 of the granted patent, they were not open to an attack based on an alleged lack of clarity (G 3/14, catchword).

4.2 The opponent made no further comment on this, either in the written procedure or (following a question from the chairman) at oral proceedings. The Board therefore sees no reason to depart from its provisional opinion, and finds that the European patent discloses the invention in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art. The objection based on the ground of opposition of Article 100(b) EPC 1973 is therefore rejected.

5. *Objections under Article 100(a) EPC 1973*

5.1 In the statement of grounds of appeal, objections under Article 100(a) EPC 1973 were based on D2 (lack of novelty and lack of inventive step in combination with common general knowledge), D28 (lack of novelty), D29 (lack of novelty) and D32 (lack of inventive step in combination with common general knowledge). An

objection of lack of novelty was also raised by the third party based on document D34.

It is undisputed that D2 forms part of the current appeal proceedings, but the proprietor challenges the admission into the proceedings of D28, D29, D32 and D34. The examination under Article 100(a) EPC 1973 will therefore commence with the objections based on D2.

5.2 In support of its submissions in relation to the arguments based on D2, the opponent also filed documents D23-D27 in appeal. These documents are extracts from dictionaries and other reference materials concerning the meaning of the term "light source". Although the proprietor maintained a formal objection against their admission, it was accepted that the meaning of this term would, in any event, have to be discussed. The Board therefore decided to admit these documents into the proceedings.

6. *Auxiliary Request I: Novelty over D2*

6.1 The proprietor argues firstly that D2 fails to disclose a light source accommodated in the housing, as claimed.

A distinction is often made in the art between a primary light source, which emits light which is generated within the source itself, and a secondary light source, which radiates light which was generated elsewhere. In fact, this terminology is used in the patent itself ("*This wall 18 then begins to function as secondary diffuse source for illuminating the diffusely translucent display faces 6 and 7*", see paragraph [0047]), and the proprietor referred in oral proceedings to this wall as a "virtual" or "indirect" light source.

The interior of the housing 12 in D2 is illuminated by the section of side-emitting fibre 20 in the housing, which, according to the commonly used terminology described above, constitutes a secondary light source; the light source 30 being the primary source. The fact that this manner of description is not used in D2 has no relevance. D2 therefore discloses a (secondary) light source accommodated in the housing.

- 6.2 The Board is also not persuaded that D2 fails to disclose "orientating means [which] are added to the light source". D2 discloses orientating means in the form of strips 66 of diffuse reflective sheet material and notches 67 formed in the core and cladding which cause the light to be "emitted from the fiber(s) 20 at a narrow enough angular distribution that the emitted light travels in a direction generally parallel to the sign face" (page 8, lines 7-12). Even if the orientating means disclosed in D2 are considered to be an integral part of the light source, it is evident from claim 4 of the patent that "added to" is considered to include "integrated with".
- 6.3 The final disputed feature is that the light (emitted from the light source via the orientating means) has a directional characteristic such that it directly illuminates at least one wall *opposite* to a wall on which the light source is arranged *almost exclusively*, e.g. more than 75% (features 1.5 and 1.8 in combination).
- 6.4 It is not disputed that this feature is not explicitly disclosed in D2. It is true, however, that a narrow angular distribution of, for example, 5°-20° is disclosed, and also that the emitted light "travels in

a direction generally parallel to the sign face" (passage bridging pages 3 and 4). It is also true that if one were assume that the fibre were mounted as in Fig. 1, with light being emitted with an angular range of 5° around a direction precisely parallel to the front face of a rectangular housing having dimensions as given in lines 1-2 of page 9, the light would be exclusively incident on the opposite (top) surface.

However, firstly, this combination of angular range, direction and housing is not disclosed in D2, and secondly, the teaching of D2 is that the light does not fall exclusively on the opposite surface, but that at least some light must fall on the back surface. The full quote from the passage bridging pages 3 and 4 is as follows (emphasis by the Board):

*"with the light being emitted from the fiber(s) at a narrow enough angular distribution (e. g., 5-20 degrees) that the emitted light travels in a direction generally parallel to the sign face, while allowing **incidence on the back surface** and other portions of the interior surface."*

A similar statement occurs on page 8 (lines 9-12):

"the light being emitted from the fiber(s) 20 at a narrow enough angular distribution that the emitted light travels in a direction generally parallel to the sign face 14, while allowing a first incidence on target surfaces (i.e., the back surface 19 and other interior surfaces)."

6.5 D2 therefore teaches that light is allowed to be incident on the back surface and the other interior

(side and top) surfaces, but not (as far as possible) on the front surface. For the purposes of the examination for novelty, it is not necessary to consider the proprietor's argument that the *majority* of the light in D2 is intended to be incident on the back surface. For present purposes it is sufficient to note that there is no disclosure in D2 that the light directly illuminates the wall opposite to the fibre "almost exclusively", irrespective of how this wording is interpreted.

6.6 The subject-matter of claim 1 of auxiliary request I is therefore new with respect to document D2.

7. *Auxiliary Request I: Inventive Step starting from D2*

7.1 The opponent argued that the subject-matter of claim 1 of auxiliary request I lacks an inventive step based on the combination of D2 and common general knowledge.

7.2 Starting from D2, the distinguishing feature of claim 1 of auxiliary request I is that set out in section 6.3, above. The problem, as set out in the description of the patent, is provide a display device such that the display face is illuminated homogeneously (paragraph [0010] and elsewhere).

7.3 The Board has noted above (points 2.3 to 2.6) that, in order to provide a homogeneously illuminated display according to the arrangement of Fig. 4, the explicit aim is to direct the light to be essentially exclusively incident on the wall (or walls) opposite to the light source. This approach is also depicted in Figs. 5 to 7, 9A and 19A.

The proprietor's explanation for this choice was that an opposite wall would provide a more homogeneously illuminated secondary light source than would be the case if other interior walls were used, on which light would be obliquely incident, and with a greater range of angles.

The Board sees no reason to dispute this assertion, and can therefore accept that the distinguishing features of claim 1 represent a plausible solution to the posed technical problem.

- 7.4 The question, therefore, is whether, starting from D2, the skilled person would find it obvious to arrive at the distinguishing feature of claim 1 to solve the above problem.

The problem addressed by D2 is essentially the same as that underlying the contested patent: to ensure uniformity of illumination for the (sign) image. The solution is to provide diffuse reflecting means on all of the interior surfaces (except the image surface) and to direct the light from the fibre to these surfaces but not directly to the image face.

The phrase "allowing a first incidence on target surfaces (i.e., the back surface 19 and other interior surfaces)" (page 8, lines 11-12) appears to convey that the interior surfaces are treated on a more or less equal footing, and this would appear to be confirmed by the disclosure that diffuse reflective films or sheets are attached to all such surfaces, i.e. the interior top and bottom surfaces 16, side surfaces 18 and back surface 19 (page 7, lines 22-25).

The Board does not therefore agree with the proprietor's argument that D2 discloses the back surface to be the preferred target surface. On the other hand, the back surface in D2 is consistently disclosed as having a much greater surface area than the wall opposite the light source (in the real example of Fig. 4, with dimensions given on page 9, lines 1-2, the back surface would have an area approximately ten times that of the top surface), and hence, even if light were directed with more or less even intensity over all the diffuse interior surfaces, the majority of the light would be incident on the back surface.

- 7.5 To reach the claimed solution starting from D2, the skilled person would have to abandon the approach advocated in D2 of directly illuminating all interior surfaces (so that most of the light fell on the much larger back surface) and instead direct the light almost exclusively to the opposite surface. The Board can see no teaching in D2 which would incite such a choice, nor any reason to believe that the common general knowledge in the art would point in this direction.
- 7.6 The Board is not called upon to decide whether the solution of the contested patent would be superior to that of D2 or *vice versa*. For present purposes it is sufficient for the Board to note that the distinguishing features of claim 1 provide a plausible solution to the posed problem which would not be obvious to the skilled person starting from D2.
8. *Request for admission of documents D28, D29 and D32*
- 8.1 As noted in the contested decision (Facts and Submissions, point 2), the two opponents cited a total

of 22 documents, referred to as D1 to D22. Of these documents, only D2 was relied upon in the statement of grounds of appeal, the other objections under Article 100(a) EPC 1973 being based on the newly cited documents D28, D29 and D32. The proprietor argues that these documents should not be admitted into the proceedings.

According to Article 12(4) RPBA, the Board has the power to hold inadmissible evidence (e.g. documents) which could have been presented at the first instance proceedings. The question therefore arises whether these documents could have been presented in the proceedings before the Opposition Division.

- 8.2 The opponent's position is that it is not reasonable to expect these documents to have been filed earlier, as they were a response to the Opposition Division's surprisingly narrow interpretation of the term "light source", according to which, the side emitting fibre of D2 was not a light source.

This argument fails to convince the Board for two reasons.

- 8.3 Firstly, even if there were objective grounds for finding the Opposition Division's interpretation of the term "light source" surprising, this could only logically justify admitting new documents in the appeal procedure on the condition that the Board also shared this interpretation.

At the oral proceedings before the Board, the discussion on whether D28, D29 and D32 should be admitted into the proceedings was (deliberately) left until after the discussion on novelty in relation to

D2, at the end of which the Chairman stated that the Board agreed with the opponent that the side emitting fibre of D2 was indeed a light source. At that point, the purported reason for admitting these documents disappeared.

- 8.4 Secondly, even if the Board does not share the Opposition Division's interpretation of the term "light source", there were no objective grounds for finding this interpretation surprising.

The proprietor had already argued in the written procedure before the Opposition Division that the side emitting fibre of D2 was not a light source (see letter of response dated 1 November 2013, section 3.2), and the Opposition Division did not comment on this matter in the communication dated 7 March 2014 accompanying the summons to oral proceedings.

It was therefore likely that this issue would be discussed at oral proceedings and that the Opposition Division would decide the matter one way or the other, with neither outcome constituting a surprise.

- 8.5 The opponent also argued for these documents to be admitted on the grounds that they are *prima facie* relevant. Whether documents which are late filed without justification should nevertheless be admitted into the proceedings solely on the basis of *prima facie* relevance is debatable. However, the Board does not find it necessary to enter into this debate, since, for the reasons given below, the Board does not find D28, D29 and D32 to be relevant *prima facie*.

- 8.6 In the opinion of the Board, one requirement (amongst others) for a document submitted by an opponent to be

regarded as relevant *prima facie* is that it should be possible to recognise immediately, and with a high level of confidence, that the claimed features which the opponent asserts are disclosed in the document are actually present.

In the present case, claim 1 defines *inter alia* that the light source directly and almost exclusively illuminates at least one wall which is at least more or less in a transverse direction relative to the display face. This means, in the opinion of the Board, that the wall is perpendicular to the display face, or very nearly so, a reading which is fully supported by the description and drawings.

- 8.7 The opponent identifies the wall(s) which is/are at least more or less in a transverse direction relative to the display face as follows:
- in D28, reflector plate 14 with bent section 29;
 - in D29, diffuse reflector 216; and
 - in D32, reflectors 19a/19b.

None of these features can be indisputably identified as a wall, indeed such identifications would appear highly questionable. Moreover, the identified features in D28 and D29 are not even approximately perpendicular to the display face, and only part of the feature identified in D32 is perpendicular to the display face.

- 8.8 Hence, on the basis of this exemplary feature alone, and without even considering the many other objections raised by the proprietor in this regard, the Board does not believe that D28, D29 and D32 can be considered to be relevant *prima facie*.

8.9 The Board therefore decided not to admit the documents D28, D29 and D32 into the proceedings.

9. *Third party observations based on D34*

9.1 Regarding submissions from a third party, the Board endorses the point made in T 637/09 (Reasons, point 2.6.1) that a Board of Appeal "should not accord the third party within the meaning of Article 115 EPC more favourable treatment than would be given to an actual party seeking to introduce such submissions at that stage of the proceedings."

9.2 In the present case the third party did not file observations in the proceedings before the department of first instance, but waited until approximately two and a half years after the filing of the notice of appeal. No reason was given for this. A new document filed by an actual party at this stage, without justification, would not be automatically admitted into the proceedings, and the same therefore applies in the case of third party observations.

9.3 Moreover, although the third party cited document D34 on the grounds that it destroyed the novelty of claim 1 of the granted patent, even the opponent accepted in oral proceedings that it was not a complete anticipation of the claimed subject-matter. The Board does not believe, therefore, that it can reasonably be considered to be *prima facie* relevant.

The Board therefore decided not to admit document D34 into the proceedings.

10. *Auxiliary request I: Summary*

10.1 Since documents D28, D29, D32 and D34 have not been admitted into the proceedings, the only admissible objections to claim 1 of auxiliary request I in relation to the grounds mentioned in Article 100(a) EPC 1973 are the objections based on D2.

Having considered these objections, the Board finds that subject-matter of claim 1 of auxiliary request I is new within the meaning of Article 52(1) EPC and Article 54 EPC 1973 and involves an inventive step within the meaning of Article 52(1) EPC and Article 56 EPC 1973. The remaining claims of auxiliary request I are dependent on claim 1.

10.2 The objections on the basis of the grounds mentioned in Articles 100(b) and 100(c) EPC 1973 have also been found not to prejudice the maintenance of the patent based on the claims of auxiliary request I.

11. *Request of the opponent that the description be adapted*

11.1 At the oral proceedings the proprietor accepted that the embodiments of Figs. 9C and 10 did not fall within the ambit of claim 1, and were not embodiments of the invention. The proprietor further accepted that there were statements in the description to the effect that Figs. 9C and 10 depicted embodiments of the invention, and that these statements were incorrect. The opponent requested that the description be amended to remove these statements.

11.2 The filing of amendments in opposition proceedings is governed by Rule 80 EPC, which, by virtue of Rule 100(1) EPC, also applies in opposition appeal proceedings (see *Case Law of the Boards of Appeal, 8th*

edition, 2016, IV.E.4.1.1). Rule 80 EPC reads as follows:

"Without prejudice to Rule 138, the description, claims and drawings may be amended, provided that the amendments are occasioned by a ground for opposition under Article 100, even if that ground has not been invoked by the opponent."

- 11.3 Where, during opposition or opposition appeal, a claim is amended in accordance with Rule 80 EPC, the Board accepts that the description may be correspondingly amended, if necessary, to restore consistency between the amended claim and the description.

However, the inconsistency identified in the present case is between the description and claim 1 of auxiliary request I, which is the same as claim 1 of the granted patent. No amendment has been made in opposition to this subject-matter which would warrant an adaption of the description.

- 11.4 The opponent's objection is essentially that there was, in the granted patent, an inconsistency between claim 1 and the description. While the Board recognises that this is indeed the case, this objection does not correspond to any ground for opposition under Article 100 EPC 1973, and the opponent's request for an amendment of the description must therefore be refused.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the department of first instance with the order to maintain the patent in the following version:
 - claims 1 to 14 of auxiliary request I, filed with letter dated 13 August 2018;
 - description and figures of the patent specification.

The Registrar:

The Chairman:



S. Sánchez Chiquero

G. Eliasson

Decision electronically authenticated