



FEDERAL COURT OF JUSTICE
ON BEHALF OF THE PEOPLE
JUDGMENT

X ZR 76/21

Delivered on:
September 26, 2023
Wieseler
Clerk of the Court
as Clerk of the Court
Registry

in the patent nullity case

Reference book: yes
BGHZ: no
BGHR: yes

Color and brightness adjustment

IntPatÜbkG Art. II § 6 para. 1 sentence 1 no. 3; PatG § 21 para. 1 no. 4

A generalization is inadmissible if it can be inferred from the originally submitted documents that individual features are inseparably connected with each other, but the patent claim does not provide for these features in their entirety (confirmation of BGH, judgment of 21 June 2016 - X. June 2016 - X ZR 41/14, GRUR 2016, 1038 para. 48 - Fahrzeugscheibe II; judgment of February 17, 2015 - X ZR 161/12, BGHZ 204, 199 para. 31 - Wundbehandlungsvorrichtung; decision of September 11, 2001 - X ZB 18/00, GRUR 2002, 49, 51 - Drehmomentübertragungseinrichtung).

BGH, judgment of September 26, 2023 - X ZR 76/21 - Federal Patent Court

The X. Civil Senate of the Federal Court of Justice at the hearing on September 26, 2023 by the presiding judge Dr. Bacher, the judges Hoffmann and Dr. Deichfuß, the judge Dr. Rombach and the judge Dr. Crummenerl

found to be right:

On appeal by the plaintiffs and dismissal of the defendant's appeal, the judgment of the 4th Senate (Nullity Senate) of the Federal Patent Court of June 29, 2021 is amended.

The German patent 102 39 449 is declared null and void.

Orders the defendant to pay the costs.

By law

Facts of the Case:

1 The defendant is the owner of the German patent 102 39 449 (patent in suit), which was filed on August 28, 2002, claiming a German priority of February 6, 2002, and relates to LED lights with color and brightness adjustment and an associated control element.

2 Patent claim 1, to which fifteen further patent claims are related back, reads:

Method for adjusting the color and brightness of LED lights with an associated control element, characterized in

- that the control element is realized as a preferably flat sensor array with a printed or otherwise labeled color triangle or a color circle or another color scale, with which the color is set via the position of the operator's finger, and
- that the selected brightness and color is generated via red, green and blue LEDs and, if necessary, additional white LEDs and that the color and brightness of the light set and desired by the operator is kept constant during the operating time via a suitable electronic circuit.

3 Patent claim 17 protects a corresponding device.

4 The plaintiffs have argued that the subject matter of the patent in suit is not patentable and goes beyond the content of the originally filed application. The defendant defended the patent in suit as granted by deleting claims 3, 6 and 12 to 16 and with five auxiliary requests in amended versions.

5 The Patent Court declared the patent in suit invalid insofar as its subject matter extends beyond the version defended by auxiliary request 3 and dismissed the further action. The plaintiffs and the defendant are appealing against this decision. The plaintiffs continue to seek the complete revocation of the patent in suit. The defendant opposes the appeal and defends the patent in suit in the version of the main request at first instance and auxiliary requests 1 and 2 as well as with amended versions of auxiliary requests 3 to 5.

Reasons for Decision:

6 Both appeals are admissible. Only the plaintiffs' appeal is well-founded.

7 I. The patent in suit concerns the adjustment of the color and brightness of
light sources that use light-emitting diodes (LEDs) to generate light.

8 1. According to the description of the patent in suit, LED lights are intended
to provide a light that is as constant as possible in terms of brightness and color.
However, the optical properties of light-emitting diodes change depending on
temperature, manufacturing variations and ageing (para. 7).

9 2. Against this background, the patent in suit concerns the technical
Problem of being able to easily adjust both the color and the brightness of an LED
light.

10 3. For the solution, the patent in suit in the granted version of
Patent claim 1 provides a method, the features of which can be structured as
follows:

1. Method for adjusting the color and brightness of LED lights
2. with a corresponding control element.
 - 2.1 The control element is realized as a preferably flat sensor array
 - 2.2 with a printed or otherwise labeled color triangle or a color wheel or another color scale,
 - 2.3 with which the color is set via the position of the operator's finger.
3. The selected brightness and color is generated by red, green and blue LEDs and, if necessary, additional white LEDs.

4. The color and brightness of the light set and desired by the operator is kept constant during the operating time via a suitable electronic circuit.

11 4. Some features require explanation.

12 a) The desired color and brightness is generated with red, green and blue LEDs according to feature 3. The additional use of white LEDs is optional.

13 b) According to feature 2, a control element designed as a sensor array, which is preferably but not necessarily flat, is used for adjustment.

14 aa) The color setting is made according to feature 2.3 via the position of the finger on the sensor array. In accordance with feature 2.2, this contains a print or other label with a color scale, for example a color triangle or color circle.

15 It follows from this feature that the sensors arranged in an array must be able to detect contact with the finger. Sensors that can be used to determine the position of a finger that is not in contact with them on the basis of suitable measured values are not sufficient.

16 bb) With regard to the brightness, features 3 and 4 only specify that it can also be set or selected by the user.

17 (1) From the context of features 1 and 2 it follows that furthermore, this setting or selection is also made with the aid of the control element according to features 2 and 2.1, as is also the case in the embodiment example described in the description.

18 This understanding is supported by the fact that the patent claim does
not provide for any other component for adjusting the brightness.

19 This is confirmed by the wording used in feature 2, according to which
the control element is "associated" with the method for adjusting color and
brightness according to feature 1. Against the background shown, this is to be
understood as meaning that the control element is the means for realizing the
functions provided for in feature 1.

20 (2) On the other hand, it is not mandatory that the recruitment
of the brightness over the duration of the finger touch on the control element, as
described in the description.

21 The description merely describes such an embodiment as preferred
(para. 17, 29). Patent claim 1 neither expressly nor implicitly refers to it.

22 This means that it is also possible to adjust the brightness using the
control element in other ways, for example by tapping the control element several
times.

23 (3) Contrary to the opinion of the Patent Court, claim 1 does not contain
the requirement that it must be possible to adjust the brightness in the same area
of the sensor array as the color.

24 Feature 2.2 does not stipulate that the color scale must extend over the
entire area of the sensor array as defined in feature 2.1. This leaves open the
possibility of using an area of the sensor array outside the color scale to set the
brightness. The only mandatory requirement is that, regardless of such a division,
it is a uniform control element that enables the setting or selection of both
parameters.

25 c) The electronic circuit provided for in feature 4, which controls the function of
the color and brightness control unit, which keeps the set color and brightness
constant over the operating time, is to compensate for undesirable changes that
may occur during operation for the reasons mentioned in the description.

26 For this purpose, according to the description, individual light-emitting diodes
can be operated briefly as photodiodes with which color and brightness can be
measured. On the basis of such a measurement, color and brightness can be
readjusted if necessary (para. 19).

27 Patent claim 1 does not necessarily provide for such an embodiment. Rather,
the color and brightness can also be kept constant with any other suitable
electronic circuit.

28 II. The Patent Court justified its decision, insofar as it is still of interest in the
appeal proceedings, essentially as follows:

29 The subject matter of patent claim 1 defended by the main request and
auxiliary requests 1 and 2 was inadmissibly broadened compared to the subject
matter of the originally filed application documents.

30 In the application documents, the sensor array is used throughout both to
adjust the color by the position of the finger and to adjust the brightness by the
duration of the persistent touch of an operator's finger. According to the main
application and auxiliary applications 1 and 2, however, the brightness
adjustment by means of the sensor array could also be effected by any other
action of the operator.

31 Feature 4, on the other hand, was not inadmissibly extended. There is no
indissoluble connection between the additional use of individual light-emitting
diodes for color and brightness measurement as envisaged in the originally filed
claim 1 and the feedback of the measurement results into a control loop.

Rather, the original description indicates that the brightness can be controlled directly or by means of a subordinate control of the effective current. As a further alternative, separate light-emitting diodes could also be used to measure brightness and color.

32 In the version of auxiliary request 3 (in the appeal proceedings: auxiliary request 4), patent claim 1 is patentable.

33 III. This assessment is subject to review in the appeal proceedings.
not withstand.

34 Contrary to the opinion of the Patent Court, the subject-matter of claim 1 goes beyond the content of the originally filed application documents not only in the granted version and the versions of auxiliary requests 1 and 2, but also in the versions of the remaining auxiliary requests.

35 1. Contrary to the opinion of the Patent Court, however, the fact that the adjustment of the brightness according to the main claim and the auxiliary claims 1 and 2 does not necessarily have to be made over the duration of the persistent touch of the finger does not constitute an inadmissible amendment.

36 Both the general explanations (para. 8) and the description of the embodiment shown in Figure 2 (para. 22) in the description of the application, the content of which corresponds to that of the disclosure (GDM1a), show that the brightness setting via the duration of contact is merely a preferred embodiment.

37 It is sufficiently clear from this that the application is not limited to such a configuration, but also includes other setting options.

38 Contrary to the opinion of the Patent Court, the fact that claim 1 formulated in the application necessarily provides for a brightness setting over the duration of contact does not lead to a different assessment.

39 The disclosure content of a patent application is not determined solely by the claims formulated therein, but also by the description and drawings. Therefore, the fact that the main claim formulated in the application necessarily provides for an embodiment described as preferable in the description does not automatically imply that only this embodiment is claimed as belonging to the invention. Special circumstances which could lead to a different assessment in the case in dispute have neither been shown nor are otherwise apparent.

40 2. However, the Patent Court wrongly reached the conclusion, that feature 4 is disclosed in the application as belonging to the invention.

41 a) The content of the application must be assessed on the basis of the entirety of the original documents submitted. The decisive factor is what the skilled person can directly and unambiguously infer from these documents as belonging to the invention (BGH, judgment of September 15, 2015 - X ZR 112/13, GRUR 2016, 50 para. 24 - Teilreflektierende Folie; judgment of February 17, 2015 - X ZR 161/12, BGHZ 204, 199 = GRUR 2015, 573 para. 21 - Wundbehandlungsvorrichtung). When exhausting the content of the disclosure, generalizations are not excluded per se. Thus, the generalization of originally disclosed embodiments is permissible if only one or only some of several features of an embodiment, which taken together, but also considered individually, are conducive to the success of the invention, have been included in the claim (BGH, judgment of 11 February 2014 - XR 107/12, para. February 2014 - X ZR 107/12, GRUR 2014, 542 para. 24 - Kommunikationskanal; decision of November 8, 2016 - X ZB 1/16, BGHZ 212, 351 para. 45 - Ventileinrichtung; decision of April 23, 2020 - X ZR 38/18, GRUR 2020, 974 para. 39 - Niederflurschienenfahrzeug).

42 Generalization is inadmissible, however, if it can be inferred from the documents originally filed that individual features are inseparably connected with each other, the patent claim contains these features

but not in its entirety (BGH, judgment of June 21, 2016 - X ZR 41/14, GRUR 2016, 1038 para. 48 - Fahrzeugscheibe II; judgment of February 17, 2015 - X ZR 161/12, BGHZ 204, 199 para. 31 - Wundbehandlungsvorrichtung; decision of September 11, 2001 - X ZB 18/00, GRUR 2002, 49, 51 - Drehmomentübertragungseinrichtung).

43 b) In view of this, patent claim 1 is inadmissibly extended by the inclusion of feature 4.

44 aa) In the description of the application, it is stated that color and brightness scattering of the light-emitting diodes used would be compensated for by a suitable electronic switching concept in accordance with the invention. Individual light-emitting diodes would be used temporarily as photodiodes. (para. 1). This makes it possible to use unselected, inexpensive light-emitting diodes (para. 9 lines 25-30). After setting the desired color and brightness by the operator, the color and brightness would be kept constant via the color and brightness measurement with the light-emitting diodes and a suitable electronic circuit (para. 9 lines 41-45).

45 Claim 1 formulated in the application also provides for keeping color and brightness constant by measurement using light-emitting diodes operated for a short time as photodiodes and control via a suitable electronic circuit.

46 The measurement by light-emitting diodes and the holding constant by an electronic circuit are therefore technically related features which must both be realized in order to fulfil the function assigned to them according to the invention.

47 bb) On the other hand, it cannot be inferred from the application that holding a constant with an electronic circuit is also part of the invention in itself.

48 (1) In claim 1 of the application, however, the definitions for the use of light-emitting diodes for light generation and for color measurement are introduced by the words "and/or".

49 However, it can only be inferred from this that the measurement can optionally also be carried out with light-emitting diodes which are not used to generate light, as is also stated as an alternative in the description of the application (para. 15). It does not follow from this that the invention is intended to include a constant holding even without measuring brightness and color.

50 (2) No further disclosure is derived from the indication that, as an alternative to direct regulation of the brightness of the light-emitting diodes, subordinate regulation of the effective current can be carried out, as shown in principle in Figure 3 reproduced below (para. 13).

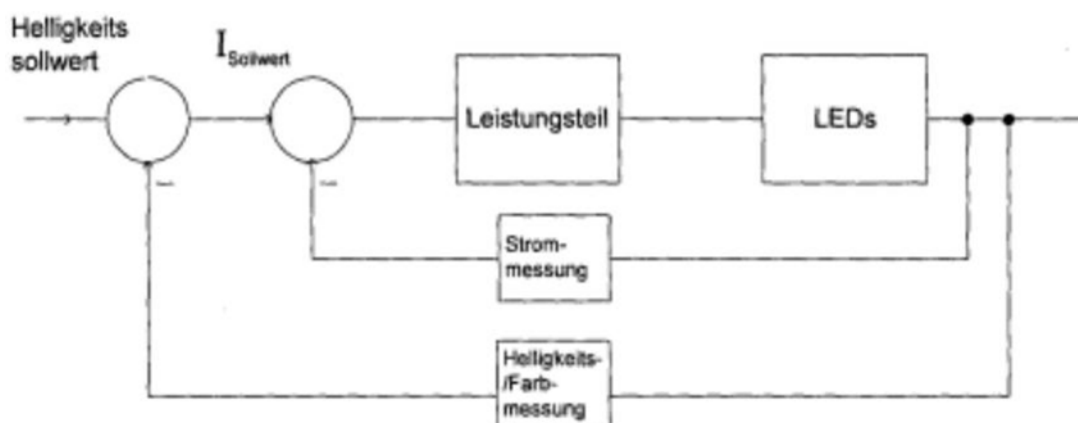


Fig. 3

51 In Figure 3, the current measurement is only shown as an additional means of control but not as a substitute for color and brightness measurement. Also in the mentioned passage of the description, the subordinate control is not presented as an alternative to a color and brightness measurement, but as an alternative to a direct control.

52 (3) The same applies to the statements according to which an additional
temperature measurement is carried out for optimum operation of the light-
emitting diodes (para. 14).

53 These statements also do not indicate that temperature measurement
can take the place of color and brightness measurement.

54 (4) Nothing else applies with regard to the statements that the current
flow in the power section of the electronics can be stabilized by suitably
connected inductors or capacitors (para. 11 lines 58-60).

55 It is also not clear from this that the means cited are intended to serve
as an alternative to color and brightness measurement using light-emitting
diodes.

56 cc) Whether it can be inferred from the content of the application with
the additional use of knowledge that it is possible to keep color and brightness
constant even without measuring these parameters does not need to be
conclusively assessed.

57 It is not sufficient for a direct and unambiguous disclosure if the subject
matter of the granted or defended version of the patent in dispute can only be
derived from the content of the original documents on the basis of independent
technical considerations. It is irrelevant whether it was obvious to make such
considerations (BGH, judgment of June 28, 2022 - X ZR 67/20, GRUR 2022, 1575
marginal no. 82 - Übertragungsparameter).

58 c) There is no different assessment for the auxiliary requests, all of which
also contain feature 4.

59 IV. The decision on costs follows from Section 121 (2) PatG and Section 97 PatG. para. 1 and Section 91 para. 1 sentence 1 ZPO.

Bacher

Hoffmann

Deichfuß

Rombach

Crummenerl

Lower court:

Federal Patent Court, decision of 29.06.2021 - 4 Ni 7/21 -