Internal distribution code:

(A) [-] Publication in OJ
(B) [-] To Chairmen and Members
(C) [-] To Chairmen
(D) [X] No distribution

Datasheet for the decision of 9 May 2025

Case Number: T 1544/23 - 3.4.01

Application Number: 19172206.5

Publication Number: 3554198

IPC: H05B47/19

Language of the proceedings: EN

Title of invention:
PROGRAMMABLE LIGHTING DEVICE AND METHOD AND SYSTEM FOR PROGRAMMING LIGHTING DEVICE

Patent Proprietor:
Signify Holding B.V.

Opponents:
Helvar Oy Ab
Vossius & Partner
Patentanwälte Rechtsanwälte mbB

Headword:
Programmable lighting device / Signify

Relevant legal provisions:
EPC Art. 54(2), 84
RPBA 2020 Art. 12(4), 13(2)

Keyword:

Main request, auxiliary requests Ia and Va - Novelty - (no)
"Main request" a - Amendment after summons - taken into account (no)
Auxiliary requests IIa, IIIa, IVa - clarity (no)
Auxiliary requests I, II, III, III', III'a, IV, IV', IV'a, and V - amendment within meaning or Article 12(4) RPBA - admitted (no)

Europäisches Patentamt
European Patent Office
Office européen des brevets

Beschwerdekammern

Boards of Appeal

Chambres de recours

Boards of Appeal of the
European Patent Office
Richard-Reitzner-Allee 8
85540 Haar
GERMANY
Tel. +49 (0)89 2399-0

Case Number: T 1544/23 - 3.4.01

D E C I S I O N
of Technical Board of Appeal 3.4.01
of 9 May 2025

Appellant: (Patent Proprietor)	Signify Holding B.V. High Tech Campus 48 5656 AE Eindhoven (NL)
Representative:	Verweij, Petronella Daniëlle Signify Netherlands B.V. Intellectual Property High Tech Campus 7 5656 AE Eindhoven (NL)
Respondent: (Opponent 1)	Helvar Oy Ab Keilaranta 5 02150 Espoo (FI)
Representative:	Papula Oy P.O. Box 981 00101 Helsinki (FI)
Respondent: (Opponent 2)	Vossius & Partner Patentanwälte Rechtsanwälte mbB Siebertstrasse 3 81675 München (DE)
Representative:	Vossius & Partner Patentanwälte Rechtsanwälte mbB Siebertstraße 3 81675 München (DE)
Decision under appeal:	**Decision of the Opposition Division of the European Patent Office posted on 27 July 2023 revoking European patent No. 3554198 pursuant to Article 101(3)(b) EPC.**

Composition of the Board:

Chairman	P. Scriven
Members:	A. Medeiros Gaspar
	L. Bühler

Summary of Facts and Submissions

I. Two notices of opposition were filed, by Helvar Oy Ab (opponent 1) and by Vossius & Partner (opponent 2).

II. Grounds of opposition under Articles 100(a),(b), and (c) EPC were invoked.

III. Among the evidence submitted in support of the grounds invoked under Article 100(a) EPC were:

D3: US 8 143 803 B2;

D4: ROAL living energy, Ozone LED devices with Universal Input and Output, 70W Total Output Power, Single Channel; and

D19: ROAL living energy, Ozone "Toolset" PC Software User Manual

IV. The Opposition Division decided to revoke the patent.

V. The proprietor appealed this decision. They request that it be set aside and the patent maintained in amended form, on the basis of a main request, a "main request a" or one of auxiliary requests I, Ia, II, IIa, III, IIIa, III', III'a, IV, IVa, IV',IV'a, V, and Va, to be considered in that order.

VI. The main request and auxiliary requests Ia, IIa, IIIa, IVa, and Va are identical to the main request and auxiliary requests 1, 2, 4, 7, and 8 underlying the contested decision, respectively. "Main request a" was filed at the oral proceedings before the Board. The other auxiliary requests were filed with the statement of grounds of appeal. Correspondingly numbered auxiliary requests comprise the same independent device claim. Those with an "a" also comprise a claim directed to a method, whereas those without, do not.

VII. The Opposition Division came (inter alia) to the conclusions:

(a) that claim 1 of the main request, as well as of auxiliary requests 1 and 8 lacked inventive step in view of the combined teachings of D3 with D4; and

(b) that claim 1 of each of auxiliary requests 2, 4, and 7 contravened one or both of Articles 84 and 123(2) EPC.

VIII. The proprietor seeks to rebut these conclusions, or to resolve the issues by amendment.

IX. Both opponents request dismissal of the appeal. They also contest consideration of "main request a", or of auxiliary requests III', III'a, IV' and IV'a.

X. Claim 1 of the main request reads (reference signs omitted):

A programmable lighting device, comprising:

at least one light source;

a power stage configured to receive power from an external supply and to supply power to the at least one light source;

a controller configured to control an operation of the power stage according to at least one operating parameter and at least one configuration setting for the programmable lighting device;

a nonvolatile memory configured to store operating parameters and configuration settings for the programmable lighting device; and

a near field communication device configured to receive radio frequency (RF) signals which are adapted to communicate operating parameters and configuration settings for the programmable lighting device

and in operation said near field communication device is configured to receive a radio frequency signal

which communicates the at least one of an operating parameter and a configuration setting for the programmable lighting device,

and in response thereto to store the at least one of an operating parameter and a configuration setting for the programmable lighting device in the nonvolatile memory,

wherein the near field communication device is configured to generate from the RF signal a supply voltage for powering the nonvolatile memory while the near field communication device stores in the nonvolatile memory the at least one of an operating parameter and a configuration setting for the programmable lighting device

wherein the at least one configuration setting identifies an active dimming interface for the programmable lighting device among a plurality of dimming interfaces available for the programmable lighting device, and

wherein the at least one operating parameter for the programmable lighting device includes at least one of: an output current to be supplied by the power stage to the at least one light source; a variable startup time parameter for the at least one light source; an operating time period after which the programmable lighting device should increase the output current; at least one temperature threshold for reducing the output current; an operating time period after which the programmable lighting device should trigger an end of life signal; and at least one time setting for automatically dimming the at least one light source.

XI. Claim 1 of "main request a" moves the definition of *the at least on configuration setting* (to after the definition of the controller and before the definition

of the nonvolatile memory), and adds, at the end of that definition as follows (addition underlined):

> *... among a plurality of dimming interfaces available for the programmable lighting device, said plurality of dimming interfaces includes a DALI interface, an analog 0-10V dimming signal interface, a Digital MutipleX interface and/or a phase-cut AC dimming interface;*

XII. Claim 1 of auxiliary requests I and Ia amends the definition of *the at least one configuration setting* of claim 1 of the main request, so that it reads (modifications indicated struck through or underlined):

> *wherein ~~the at least one~~ a first configuration setting identifies an active dimming interface for the programmable lighting device among a plurality of dimming interfaces available for the programmable lighting device and a second configuration setting includes a firmware [sic] for the controller,*

XIII. Claim 1 of auxiliary requests II and IIa adds at the end of the definition of *the at least one configurations setting* of claim 1 of the main request(addition underlined):

> *... plurality of dimming interfaces available for the programmable lighting device and wherein the term configuration setting refers to an operating mode of the*

programmable lighting device configuring the programmable lighting device to operate with a dimming interface in order to dim the light source;

XIV. Claim 1 of auxiliary requests III and IIIa amend the definition of the *at least one operating parameter* of claim 1 of the auxiliary requests II and IIa as follows (modifications indicated struck through or underlined):

wherein the at least one operating parameter for the programmable lighting device includes at least one of: an output current to be supplied by the power stage to the at least one light source; a variable startup time parameter for the at least one light source; an operating time period after which the programmable lighting device should increase the output current; at least one temperature threshold for reducing the output current; an operating time period after which the programmable lighting device should trigger an end of life signal; ~~and~~ at least one time setting for automatically dimming the at least one light source, and a selection of which dimming interface is active.

XV. Claim 1 of auxiliary requests III' and III'a amend the definition of the *at least one configuration parameter* in claim 1 of the main request, as indicated above for claim 1 of auxiliary requests III and IIIa, with regards to claim 1 of auxiliary requests II and IIa.

XVI. Claim 1 of auxiliary requests IV and IVa add, at the end of claim 1 of auxiliary requests II and IIa the limitation:

wherein the at least one configuration setting and at least one operating parameter are programmed into the programmable lighting device by means of a [sic] NFC programming unit associated with a user interface.

XVII. Claim 1 of auxiliary requests IV' and IV'a add, at the end of claim 1 of then same limitation that claim 1 of auxiliary requests IV and IVa add at the end of claim 1 of auxiliary requests II and IIa.

XVIII. Claim 1 of auxiliary requests V and Va adds at the end of claim 1 of the main request the limitation:

and wherein the configuration setting comprises firmware for the controller.

Reasons for the Decision

Main request - Claim 1 - Patentability vis-à-vis D3

1. It is undisputed that D3 discloses a programmable lighting device comprising structural elements similar to those of the *programmable lighting device* defined in

claim 1 of the main request (D3: figure 3; column 3 lines 11 to column 4 line 13; column 4 lines 30 to 46).

2. Concretely, the programmable light device of D3 comprises, as the device of claim 1, a light source (the lamp 18 in figure 3), a power stage (the supply voltage - not shown in figure 3), a controller (the lamp control circuit 20 comprising a lamp driving circuit 22), a nonvolatile memory (the memory 26), and a communication device (the communication circuit 24).

3. Where the parties disagree is on whether or not the controller, the nonvolatile memory, and the communication device of D3 fall within the further definitions of those elements in the claim.

4. Concerning the controller, claim 1 defines *a controller configured to control an operation of the power state according to at least one operating parameter and configuration setting*.

5. It also defines that the *at least one operating parameter includes at least one* element from a list comprising *an output current to be supplied by the power stage to the at least one light source;* and that *the at least one configuration setting identifies an active dimming interface for the programmable lighting device among a plurality of dimming interfaces available for the programmable lighting device.*

6. The proprietor argued that the controller of D3 was not configured to control the operation of the power stage according to a configuration setting identifying an active dimming interface, as defined in the claim.

7. According to the proprietor, the term *dimming interface* had a well known meaning in the art. It defined an interface between a human- or sensor-controlled dimmer and a light source. Such an interface received an input signal from the dimmer and translated that input signal into an output signal, for dimming the light accordingly.

8. Examples of such dimming interfaces would be those mentioned in paragraph [0004] of the patent, or mentioned in D4 (page 3). The "adjustable dimmer function" mentioned in D19 (page 7), whereby the amount of dimming of the light depends on the time of the day, would, to the contrary, not be understood as constituting a *dimming interface*, in the sense of the claim.

9. As D3 did not disclose any dimmer or that a sensor input signal was fed to the controller of D3, it did not disclose its controller as being configured to operate according to a *dimming interface*. Instead, it merely disclosed the control of the output of the lamp according to the location of the lamp pole (column 3, lines 31 to 37).

10. The Board agrees with the proprietor in that a dimming interface converts an input signal into an output signal for dimming the light source accordingly.

11. However, the Board disagrees that the term *dimming interface* implies any particular type of input signal, or that D3 does not disclose an input signal, on the basis of which the output of the light source is controlled.

12. In fact, D3 discloses its lamp control circuit as being provided with "predetermined settings", configuring it to control the lamp to output "more or less light" according to "one or more external conditions, such as amount of traffic, weather conditions, dusk and dawn hours, etc." (column 3 lines 23 to 37).

13. D3 further explains that the settings include "at least a lamp current, a lamp voltage or a lamp power" possibly "as a function of time or depending on a light condition of the environment or the like" (column 3, lines 38 to 41), and that the "settings" are to be supplied to the lamp control circuit so as to enable it to control the lamp accordingly (column 3, lines 41 to 44).

14. These "settings" (in the wording of D3), then, constitute a *configuration setting that identifies an active dimming interface* (in the wording of the claim), in the sense that they configure the lamp control circuit of D3 to receive an input signal, be it the time or the light condition of the environment, and convert it into an output signal on the basis of which the output of the light source is controlled.

15. The further disclosure, in D3, that "the settings may be dependent on the location of the light pole" (D3: column 3, lines 31 to 37), rather than contradicting the conclusion above, exemplifies the possibility of the controller of D3 being configured to operate in accordance with different settings, i.e.to implement different dimming interfaces, depending on the location of the light pole.

16. The proprietor also seems to read, in the definition that *the at least one configuration setting identifies*

an active dimming interface among a plurality of dimming interfaces available to the programmable lighting device, the requirement that the controller of the programmable lighting device be itself configured to control the light source according to a plurality of dimming interfaces from among which an active one would be chosen.

17. The Board notes, however, that no limitation to the configuration of the controller results from the definition of the at least one configuration setting recited above.

18. In fact, the claim merely requires that the controller be configured to control the operation of the power stage according to one configuration setting that identifies an active dimming interface.

19. The further definition, that the active dimming interface is one *among a plurality of dimming interfaces available to the programmable lighting device*, does not require that said plurality be in some way present in the device defined. Instead, it refers, at most, to the possibility of implementing in the device, different dimming interfaces; or, in other words, to the programmability of the lighting device.

20. As indicated above, D3 discloses the possibility of providing different "settings" to its controller, depending on the circumstances (D3: column 3, lines 34 to 37; column 4, lines 5 to 9 and 47 to 52), and, hence, the possibility of implementing in the device of D3 a different dimming interface.

21. Therefore, the controller of D3 is configured as defined in the claim.

22. Also, the *nonvolatile memory configured to store operating parameters and configuration settings,* defined in the claim is no different than the nonvolatile memory disclosed in D3.

23. Indeed, D3 discloses the memory as storing operating parameters and configuration settings (D3: column 4, lines 9-16).

24. Hence, even if the scope of the claim were understood as defining a nonvolatile memory specifically storing the mentioned elements, there would still be no difference between the memory of the device D3 and that of the device of claim 1.

25. Concerning the communication device, the parties dispute whether or not the communication circuit provided with a RFID-tag of D3, (D3: column 4 lines 30 to 33) is a *near field communication device,* as defined in the claim.

26. The opponents argue that the expression *near field communication device* required simply that the communication device be suitable for near field communication, which the RFID tags of D3 were.

27. The proprietor did not contest that RFID tags were suitable for near field communication, but argued instead that the expression *near field communication device* had more restricted and clear meaning in the art, namely a device that complied with one of a number of standards such as ISO/IEC 15693, mentioned in paragraphs [0064] and [0067] of the patent. Consequently, the communication device provided with a RFID tag of D3 did not fall under this narrower interpretation of the term.

28. Countering those arguments, the opponent also referred to the standards mentioned in paragraphs [0063] and [0064] of the patent, and argued that some of those encompassed RFID tags.

29. The Boards fails to see the relevance of the references to different standards, given that the claim does not refer to any.

30. The Board, nevertheless, recognises the evolution of the meanings given to the term *near field communication device* over time, and, in the present case, considers it conceivable that the skilled person, reading the term *near field communication device* in the claim, would consider both interpretations. They would, however, see no reason to exclude the broader interpretation advocated by the opponents, since none of the further definitions present in the claim, concerning the configuration, or the operation, of the communication device, is incompatible with it.

31. Concerning those further definitions, claim 1 defines the communication device as being *configured to receive radio frequency (RF) signals which are adapted to communicate operating parameters and configuration settings for the programmable lighting device.*

32. The Board understands this as requiring that the communication device be configured to receive radio frequency signals, these being capable of transmitting both operational parameters and configuration settings.

33. The proprietor argues that the RFID-tag of D3 would have limited communication capabilities, and hence the RF signal it would be configured to receive would not be *adapted to communica*te *operating parameters and*

configuration settings, as defined in the claim. This would only be possible with an NFC device in the proprietor's narrow sense.

34. The Board is not persuaded by this argument, since D3 explicitly describes its communication device as receiving RF signals communicating data (D3: column 4, lines 30 to 35), and said data as possibly comprising lamp settings and operating parameters (D3: column 4 lines 53-54).

35. It is furthermore noted that, even though the claim defines the communication device as being *configured to receive radio frequency signals adapted to communicate configuration settings*, it also defines that, *in operation*, the communication device *is configured to receive a radio frequency signal which communicates at least one of an operating parameter and a configuration setting, and to store the at least one of an operating parameter and a configuration setting.*

36. Hence, though requiring that the communication device be adapted to receive RF signals capable of communicating operating parameters and configuration settings, the claim does not require that, in operation, the communication device necessarily receive both.

37. The proprietor's understanding, that the claim requires that the configuration setting be wirelessly received by the communication device, finds no support in the wording of the claim.

38. Therefore, also the communication device of the device of D3 is configured as defined the claim 1.

39. Claim 1 lacks thus novelty in view of D3 (Article 54(2) EPC). Consequently, the main request is not allowable.

"Main request a" - Consideration

40. "[M]ain request a" was submitted during oral proceedings before the Board, as a first auxiliary request, to be considered after the main request and before the other auxiliary requests.

41. Claim 1 of this request further defines that the plurality of dimming interfaces *includes a DALI interface, an analog 0-10V dimming signal interface, a Digital MutipleX interance and/or a phase-cut AC dimming interface*.

42. Consideration of this request is subject to the provisions of Article 13(2) RPBA, and requires, in principle, that exceptional circumstances be present and that these be justified by cogent reasons.

43. On submission of this request, the proprietor argued that it was filed in reaction to the Board's interpretation of the term *dimming interface*, and conclusion that claim 1 of the main request lacked novelty in view of D3. By restricting that term to the concrete examples disclosed in the patent, it overcame that issue in a straightforward manner.

44. The Board does not recognise this as justifying the existence of exceptional circumstances, nor did the proprietor explicitly argue that any existed.

45. As explained above, with regards to the main request, claim 1 merely requires that the controller of the

programmable lighting device implement (one) dimming interface of the plurality, defined in the claim as available for the device. The further definition of that plurality as including four specific interfaces neither changes that conclusion, nor excludes devices implementing other dimming interfaces.

46. Hence, the amendment, *prima facie,* does not succeed in limiting the scope of claim 1 of this request, with regards to claim 1 of the main request.

47. The Board sees, therefore, no reason for taking this request into account (Article 13(2) RPBA).

Auxiliary requests Ia and Va - Claim 1 - Merits - Patentability

48. Auxiliary requests Ia and Va are identical to auxiliary request 1 and 8 of the contested decision, respectively.

49. Claim 1 of auxiliary request Ia differs from that of the main request in that, instead of defining that *the at least one configuration setting identifies an active dimming interface for the programmable lighting device among a plurality of dimming interfaces available for the programmable lighting device,* it defines that *a first configuration setting* does this, and that *a second configuration setting includes a [sic] firmware for the controller.*

50. No amendments were, however, introduced into the definition the configuration of the controller, which, is still *a controller configured to control the operation of the power stage according to at least one*

operating parameter and at least one configuration setting

51. This means that claim 1 of the auxiliary request, encompasses lighting drivers comprising controllers configured according to only the first configuration setting, according to only the second, or according to both. Claim 1 of the main request was limited to the first of these alternatives.

52. Consequently, the amendments, instead of limiting the scope, broaden it.

53. Thus, the reasoning presented above, as to the lack of novelty of claim 1 of the main request in view of D3, also applies, to claim 1 of this request.

54. In contrast, auxiliary request Va does limit the controller so that it both comprises firmware and an active dimming interface. However, it still lacks novelty in view of D3. This is because, as acknowledged by the proprietor, any controller configured to control the power to a light source necessarily comprises firmware.

55. The proprietor's arguments on novelty, as concerns the definition of a configuration setting comprising firmware, were rather based on the understanding that the claim required that firmware be received by the communication device.

56. However, as already explained with regards to the main request, such an understanding is not reflected in the wording of the claim, which encompasses devices that are not configured to receive any configuration setting.

57. Therefore, claim 1 of auxiliary requests Ia and Va is also not new in view of D3. Consequently, also these requests are not allowable.

Auxiliary requests IIa, IIIa, IVa - Claim 1- Merits - Clarity

58. Auxiliary requests IIa, IIIa, and IVa are identical to auxiliary request 2, 4, and 7 underlying the decision, respectively.

59. These versions of claim 1 further define that *the term configuration setting refers to an operating mode of the programmable lighting device configuring the programmable lighting device to operating with a dimming interface in order to dim the light source.*

60. This wording does not clearly further limit the scope of the claim, given that it already defined that *the at least one configuration setting identifies an active dimming interface for the programmable lighting device*. Instead, by defining the same entity twice, employing different wording, a clarity issue is introduced, as correctly noted by the opponents.

61. Claim 1 of auxiliary request IIIa also adds, to the list from which the operating parameter might be selected in claim 1 of auxiliary request IIA, the possibility that it might be *a selection of which dimming interface is active*.

62. This amendment, too, introduces a clarity issue, as it conflicts with the definition of the *configuration setting* as identifying *an active dimming interface,* thus conflating the apparently distinct terms

configuration setting and *operating parameter*, as also correctly noted by the Opposition Division.

63. Claim 1 of auxiliary request IVa adds, to claim 1 of auxiliary request IIa, the definition that *the at least one configuration setting and at least one operating parameter are programmed into the programmable lighting device by means of a [sic] NFC programming unit associated with a user interface.*

64. Such a definition attempts to delimit the device of claim 1 by reference to elements external to it, such as the programming unit, or the user interface, and, how such a device is programmed. It does not clearly delimit device itself, or its configuration as defined in claim 1. Thus, it introduces yet another clarity issue.

65. Therefore, claim 1 of each of auxiliary requests IIa, IIIa, and IVa contravenes Articles 84 EPC. Consequently, these requests are also not allowable.

Auxiliary requests I, II, III, IV, and V - Consideration

66. Auxiliary requests I, II, III, IV and V were filed for the first time on appeal. Their consideration is, therefore, at the discretion of the Board under of Article 12(4) RPBA.

67. They differ from the correspondingly numbered auxiliary requests Ia, IIa, IIIa, IVa, and Va, on which they are based, only in that the claims directed to methods have been deleted. The device claims have not been changed.

68. The proprietor argued that these new requests should be admitted, for the very reason that the only amendments lay in the deletion of the method claims.

69. However, that also renders immediately apparent that the reasoning presented above, regarding claim 1 of each in auxiliary requests Ia, IIa, IIIa, IVa, and Va applies, to claim 1 of each of auxiliary requests I, II, III, IV, and V.

70. Therefore, the Board sees no reason to admit these requests into proceedings (Article 12(4) RPBA).

Auxiliary requests III', III'a, IV', and IV'a - Consideration

71. Auxiliary requests III', III'a, IV', and IV'a were also filed only on appeal. Hence, their consideration is also at the discretion of the Board, under Article 12(4) RPBA.

72. Claim 1 of auxiliary requests III' and III'a adds, to claim 1 of the main request, the same definition that claim 1 of auxiliary request IIIa adds to claim 1 of auxiliary requests IIa. Claim 1 of auxiliary requests IV' and IV'a adds, to claim 1 of the main request, the same definition that claim 1 of auxiliary request IVa adds to claim 1 of auxiliary requests IIa.

73. The proprietor argued that these requests were filed in reaction the the Opposition Division's findings with regards to claim 1 of auxiliary request IIa. They remove an amendment that was found to introduce issues of added-matter, while leaving the other amendments that had been introduced in the claim. As those other amendments were already present in claim 1 of auxiliary

requests IIIa, or claim 1 of auxiliary request IVa, these requests should be admitted into the proceedings.

74. However, those other amendments also introduced clarity issues, as indicated under paragraphs 61 to 64 above, in reference to claim 1 of either auxiliary request IIIa or IVa.

75. Since it is immediately apparent that the same issues are also present in claim 1 of each of these new requests, the Board sees no reason to admit these requests into proceedings (Article 12(4) RPBA).

Conclusion

76. In view of the above:
(a) the main request and auxiliary requests Ia, IIa, IIIa, IVa and Va are not allowable; and
(b) "main request a" and auxiliary requests I, II, III, III', III'a, IV, IV', IV'a and V are not admitted into the proceedings.

77. There is, therefore, no reason for setting aside the contested decision.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chair:

D. Meyfarth P. Scriven

Decision electronically authenticated