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**Datasheet for the decision
of 7 June 2024**

Case Number: T 1088/21 - 3.4.01

Application Number: 13894959.9

Publication Number: 3053414

IPC: H05B37/02, H04W84/18, H05B33/08

Language of the proceedings: EN

Title of invention:
INTELLIGENT LIGHTING CONTROL

Patent Proprietor:
Casambi Technologies OY

Opponent:
Zumtobel Lighting GmbH

Headword:
Communication between luminaire units/ Casambi Technologies OY

Relevant legal provisions:
EPC Art. 56
RPBA 2020 Art. 12(2), 12(3), 12(4), 12(6), 13(1), 13(2), 13(3)

Keyword:

A reasoning of lack of novelty is also a reasoning of lack of inventive step (yes)
Inventive step - main request (no)
Amendment within meaning of Art. 12(4) RPBA 2020 - Auxiliary Requests 1 to 6 - admitted (no) - should have been submitted during opposition proceedings (yes) - suitable to address the issue (no)
Amendment to appeal case after summons - Auxiliary request 7 - admitted (no) - exceptional circumstances (no) - overcomes the issue (no)

Decisions cited:

G 0007/95, T 0131/01, T 0597/07



Beschwerdekammern

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Case Number: T 1088/21 - 3.4.01

D E C I S I O N
of Technical Board of Appeal 3.4.01
of 7 June 2024

Appellant: Zumtobel Lighting GmbH
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Decision under appeal: **Decision of the Opposition Division of the
European Patent Office posted on 10 May 2021
rejecting the opposition filed against European
patent No. 3053414 pursuant to Article 101(2)
EPC.**

Composition of the Board:

Chairman P. Scriven
Members: A. Medeiros Gaspar
C. Almberg

Summary of Facts and Submissions

- I. The patent was opposed on grounds under Article 100(a), 100(b), and 100(c) EPC.

- II. Among other documents, the opponent submitted

D1 US2006/0154598 A1

and argued that its disclosure deprived the subject-matter of claim 1 of the patent of an inventive step.

- III. The Opposition Division came to the conclusion that none of the grounds of opposition brought forward by the Opponent prejudiced maintenance of the patent, and rejected the opposition.

- IV. The opponent appealed, arguing, inter alia, that claim 1 of the patent lacked novelty in view of D1. They requested that the decision be set aside and the patent revoked.

- V. The proprietor (respondent) contested the opponent's submissions and argued, inter alia, that the new novelty objection should not be admitted into proceedings and that inventive step should also not be considered, since the opponent had not submitted any argument on inventive step, in their grounds of appeal. They requested that the appeal be dismissed, i.e. that the patent be maintained as granted (main request); or

that the patent be maintained in amended form on the basis of one of auxiliary requests 1 to 6, filed for the first time with the reply to the appeal.

- VI. In a communication under Article 15(1) RPBA, the Board informed the parties of its preliminary opinion on all of the appellant's grounds of opposition.

- VII. Concerning novelty and inventive step of claim 1 of the main request in view of D1, the Board indicated its inclination to consider both issues, referred to the differences identified in the notice of opposition and in the contested decision, and indicated that, even if they were indeed differences, neither seemed capable of contributing to inventive step.

- VIII. The Board also indicated its inclination not to consider any of the auxiliary requests 1 to 6 in appeal proceedings.

- IX. In reaction, the proprietor submitted further arguments in defence of all requests on file, and a further auxiliary request 7.

- X. At oral proceedings, the parties maintained their requests, and the Board announced its decision.

- XI. Claim 1 of the main request (the patent) reads (reference signs omitted):

A luminaire unit comprising a functionally connected control logic entity with a wireless transceiver to cooperate with at least one dedicated light source to illuminate an environment, said luminaire unit being configured to communicate with one or more other luminaire units via a mesh network established utilizing the wireless transceivers thereof,

wherein said luminaire unit is at least electrically connected to a user-operable control switch device for controlling the luminaire unit, wherein the control switch device is preferably a power switch, such as a wall-mounted on/off power switch, providing at least two positions, and

the control logic entity being configured to, upon detection of a predetermined switch signal responsive to the operation of the control switch device, transmit a predetermined message via the wireless transceiver to enable the one or more other luminaire units in the mesh network to execute a responsive light source control action as configured in the control logic entities thereof relative to the captured message,

wherein the control logic entity of said luminaire unit is further configured to, in response to said detection of the predetermined switch signal, determine and trigger at the luminaire unit a first control action of the at least one

dedicated light source, wherein preferably the first control action includes adapting at least one feature selected from the group consisting of: brightness, colour, colour tone, alignment, illumination pattern, and blinking or strobing sequence, and

wherein the control logic entity of the luminaire unit is, in response to a subsequent detection of the same predetermined switch signal, configured to trigger a second, different control action of the at least one dedicated light source and optionally transmit a further message, different from said predetermined message, towards the one or more other luminaire units.

- XII. Claim 1 of the auxiliary request 1 add the following (underlined) to the start of claim 1 of main request:

A luminaire unit provided with at least one dedicated light source and comprising a functionally connected control logic entity with a wireless transceiver to cooperate with the at least one dedicated light source to illuminate an environment ...

- XIII. Claim 1 of the auxiliary request 2 deletes the optional transmission of a further message at the end of claim 1 of the main request.

XIV. Claim 1 of auxiliary request 3 makes at the end of claim 1 of the main request the transmission of a further message compulsory:

... and ~~optionally~~ transmit a further message, different from said predetermined message, towards one or more other luminaire units.

XV. Claim 1 of auxiliary request 4 makes compulsory another feature that is optional in claim 1 of auxiliary request 3 (amendment indicated struck through):

... wherein ~~preferably~~ the first control action includes adapting at least one of brightness, colour, colour tone, alignment, illumination pattern, and blinking, or strobing sequence ...

XVI. Claim 1 of auxiliary request 5 adds, at the end of claim 1 of auxiliary request 4:

..., wherein the detected predetermined switch signal comprises a sequence of a plurality of signal states or pulses.

XVII. Claim 1 of auxiliary request 6 adds, to claim 1 of auxiliary requests 5:

..., wherein the wireless transceivers comply with Bluetooth low-energy, wherein the mesh network is based on Bluetooth low

*energy data energy in compliance with
Bluetooth 4.0 specifications, ...*

XVIII. Claim 1 of auxiliary request 7 is the same as claim 1 of the main request, except that the optional feature, indicated above with regard to auxiliary request 4, is now compulsory.

Reasons for the Decision

The invention as described by the proprietor

1. The invention pertains to lighting systems, and to the control and communication between the luminaire units of such systems.
2. The patent describes, inter alia, a luminaire unit connected to a user-operable control switch device, and comprising a control logic entity with a wireless transceiver, enabling it not only to control its light source but also to transmit messages via a mesh network to other luminaire units that have their own control logic entities.
3. This allows the control of a plurality of luminaire units with a single user-operable switch, connected to a single luminaire unit.
4. The control logic entity is also described as configured to react differently to subsequent detections of the same switch signal.

Consideration of novelty and inventive step for claim 1 of the main request, in view of D1

5. The proprietor objects to the consideration both of novelty and of inventive step for claim 1 of the main request in view of D1, arguing that the novelty objection was brought forward for the first time on appeal and that, additionally, no inventive step arguments were submitted on appeal.
6. However, the question of inventive step for claim 1 of the main request in view of the same disclosure of D1 was raised by the Opponent in the notice of opposition and decided upon by the opposition division.
7. Additionally, contrary to the opinion of the proprietor, this question was also maintained by the opponent on appeal, since the opponent's argument that claim 1 lacks novelty is, implicitly, also an argument that it lacks an inventive step. In fact, in the absence of an identifiable difference, no inventive step can be recognised (G 7/95, reasons 7.2; T 131/01, OJ EPO 2003, 115, reasons 3.1; T 597/07, reasons 5).
8. Hence, the question of the inventive step for claim 1 of the main request in view of D1 forms part of these appeal proceedings (Article 12 (1) and (2) RPBA).
9. It is true that the inventive step argumentation brought forward by the Opponent on appeal is different from that in the notice of opposition, where a difference was identified and argued not to contribute to an inventive step; or later during opposition proceedings, when, following to the identification of another difference by the Opposition Division, the

opponent argued that also that other difference did not contribute to an inventive step.

10. The change in the inventive step argumentation on appeal, can, however, be regarded as an endorsement of the findings of the Opposition Division, that the difference initially identified by the opponent was actually disclosed in D1, and a contestation of the existence of the other difference that the Opposition Division identified.
11. It is also true that the opponent only contested, in their grounds of appeal, the Opposition Division's finding of that other difference, but did not contest the further finding that that difference involved an inventive step.
12. While the argument that a claim lacks novelty is sufficient to substantiate lack of an inventive step, that further finding of the Opposition Division could (and should) also have been contested in the grounds of appeal (cf. Article 12(3) RPBA).
13. Nevertheless, in order to be able conclusively to dispose of the question of inventive step for claim 1 of the main request in view of D1, the Board must look at any point of novelty and assess its obviousness.
14. Therefore, in its preliminary opinion, the Board addressed the obviousness of the difference identified by the Opposition Division as involving an inventive step, and of the difference initially identified by the opponent in the notice of opposition. Both were also identified by the proprietor, in their reply to the appeal.

15. The subsequent inventive step arguments, submitted by both parties, did not significantly differ from those that had been exchanged before the Opposition Division, and were, in any case, reactions to the Board's preliminary opinion. They should be considered (Article 13(3) RPBA).
16. This is in line with the guidance provided by G 7/95, according to which, even though the ground of lack of novelty is a fresh ground of opposition that may not be introduced into appeal proceedings, without the agreement of the proprietor, the allegation that a claim lacks novelty may be considered in the context of deciding upon the ground of lack of an inventive step (G 7/95, OJ EPO 1996, 626 , headnote).

Main request - Inventive step in view of D1

17. D1 discloses a luminaire unit (L1), comprising a control logic entity with a wireless transceiver enabling it to communicate with a radio lamp switch (SW1), as well as with other luminaire units (L2 to L10), via a mesh network (D1: figure 1; and paragraphs [0022], [0023], [0026] to [0028], and [0030]).
18. Claim 1 of the patent requires that the luminaire unit be *at least electrically connected to a user-operable control switch device for controlling the luminaire unit.*
19. In the notice of opposition, the opponent identified this "electrical connection" as the only difference between the subject-matter of claim 1 and the disclosure of D1. They interpreted this as requiring a wired connection, while the connection between the

radio switch (SW1) and the luminaire unit (L1) of D1 was wireless.

20. In their reply to the appeal, the proprietor also identified this as a difference.
21. The Board agrees that the term "electrical connection" requires means for transmitting an electrical signal, and does not cover a wireless connection.
22. Hence this feature constitutes a difference between the subject-matter of claim 1 and the disclosure of D1.
23. Claim 1 of the patent also requires that the control logic entity of the luminaire unit be, in essence, configured to:
 - (a) in response to the detection of a predetermined switch signal
 - (i) trigger a first light source control action at the luminaire unit; and
 - (ii) transmit a predetermined message to the other luminaire units for them to execute a responsive light control action; and
 - (b) in response to "a subsequent detection of the same predetermined switch signal"
 - (i) trigger a second, different light source control action at the luminaire unit.
24. D1 discloses that a radio message issued by the switch SW1 will be received and acted upon by the luminaire unit L1 (paragraph [0023], last sentence).
25. It further discloses that the luminaire unit L1 can broadcast the message to the other luminaire units in the range, and that "applying that broadcasting process

to the network would turn all lamp devices on (or off, if already on)" (paragraph [0030]).

26. The parties dispute whether or not the turning on and turning off of a luminaire unit constitute the same or different control actions.
27. In general, the skilled person would have understood turning on and turning off of a luminaire unit as different control actions, just because they lead to opposite results in terms of illumination.
28. On the other hand, it would have been quite possible for the skilled person to designate toggling the on/off state of illumination as one action.
29. Since, however, the claim 1 does not specify what a control action is, the term encompasses both alternatives.
30. The proprietor argues, that, in the patent, and in particular paragraph [0008], in light of which claim 1 should be interpreted, a change in the on/off state of the light sources is described as constituting one and the same action.
31. However, paragraph [0008] only says that *Generally a control action may ... adapt the brightness of one or more light sources, on/off state of the light sources, emitted color or color tone, ..., etc.* This does not define the adaptation of the on/off state of the light sources as one control action, any more than that adaptation of brightness and of on/off state constitute one action. Nor would it matter if paragraph [0008] did make such a definition. That would not limit a broad term in the claim.

32. Since D1 discloses its luminaire unit L1 as configured to turn on (or off, if already on) its luminaire unit in response to subsequent detections of the same switch signal, and these actions can be understood as two different control actions, D1 discloses a luminaire unit configured as defined in claim 1 of the patent.
33. There is, therefore, no difference between the configuration of the control logic entity of the luminaire unit of D1 and that of the luminaire unit defined in claim 1 of the patent.
34. Consequently, claim 1 of the patent differs from the disclosure of D1 only in the connection between the user-operable control switch and the luminaire unit. In claim 1, it is an electrical connection, whereas, in D1, it is a radio connection.
35. The proprietor argues that this difference enabled the luminaire unit of claim 1 to be retrofitted into an existing infrastructure comprising a simple wall-mounted on/off switch.
36. The Board notes, however, that the claim does not define the switch as a simple, wall-mounted on/off switch, but rather as a *user-operable control switch device*, a definition that encompasses more sophisticated *user-operable control switch devices*, as suggested, for instance in paragraph [0038] of the patent.
37. Starting from the disclosure of D1, the Board rather sees the objective problem as that of providing an alternative connection between the switch SW1 and the luminaire unit L1.

38. Wired connections between switches and luminaires certainly belonged to the skilled person's common general knowledge, and would have been among the few well-known solutions to that problem, if not the most well-known, that the skilled person would immediately have considered and readily implemented, thereby arriving at the subject-matter of claim 1.
39. Even considering the proprietor's proposed problem of retrofitting the luminaire unit of D1 to a conventional (wired) wall-mounted on/off switch, the Board cannot see an inventive step.
40. In such a situation, the skilled person, familiar with the transmission of control signals over wires would have readily implemented the necessary adaptations, and so established an electrical connection between luminaire unit L1 and the conventional, wall mounted on/off switch, thereby arriving once again at a luminaire unit according to claim 1 of the patent.
41. Therefore claim 1 of the main request lacks an inventive step in view of D1 (Articles 52(1), 56 and 100(a) EPC).
42. Consequently, the main request is not allowable.

Auxiliary requests 1 to 6

43. Auxiliary requests 1 to 6 were submitted for the first time with the reply to the grounds of appeal.
44. They are amendments in the sense of Article 12(4), first sentence, RPBA, and may be admitted only at the

discretion of the Board, subject to the provisions of Article 12(4) to 12(6) RPBA.

45. In their reply to the appeal, the proprietor did not justify their submission at that stage of proceedings, contrary to the requirements of Article 12 (4), third sentence, RPBA. They sought to do so only after the Board's preliminary opinion, and again during oral proceedings.
46. The Board is not persuaded by the argument that these requests could not have been submitted before the Opposition Division, nor by the argument that they are reactions to new objections, brought forward for the first time in the opponent's grounds of appeal.
47. As already indicated above, the question of inventive step, for claim 1 of the patent as granted in view of D1, was raised in the notice of opposition. Auxiliary requests representing fall-back positions in reaction to such an attack could and should have been filed with the reply to the opposition (Article 12(6), second sentence, RPBA). And indeed, some auxiliary requests were then filed, that were not pursued on appeal.
48. Also, the grounds under Articles 100(b) and (c) EPC, that auxiliary requests 1 and 2 are argued to address, had already been brought forward with the notice of opposition.
49. These, and auxiliary requests 3 to 6 are furthermore clearly not suitable for addressing the issue of lack of an inventive step in view of D1, identified above with regard to the main request (Article 12(4), fifth sentence, RPBA), for the following reasons:

- (a) Auxiliary request 1 adds a limitation, namely that the luminaire unit has a light source, that is also disclosed in D1;
- (b) Auxiliary request 2 removes, from claim 1 of the main request, a feature that was defined as optional, so there is no change in subject-matter;
- (c) Auxiliary request 3 further defines the luminaire unit as configured to transmit a message different from the first message to the other luminaire units, the different message lacking any definition as to its content or any link to any other feature of the claim, and being, therefore, unable to contribute to any technical effect;
- (d) Auxiliary request 4 further defines the first light control action as including adapting at least one of a set of well-known lighting parameters, including, for instance, brightness, which represents a trivial addition to the on/off actions disclosed in D1, if these on/off actions are themselves not understood as brightness control actions;
- (e) Auxiliary request 5 further specifies merely that the switch signals are comprised of a sequence of signal states or pulses, but that says only that some digital signals are involved; and
- (f) Auxiliary request 6 further defines that the wireless transceiver of the luminaire unit complies with a well-known communication protocol.

50. Hence, even if auxiliary requests 3 to 6 seem to introduce further differences vis a vis the disclosure of D1, they are unrelated to one another and to the electrical connection identified above as the difference with regard to claim 1 of the main request, and each unsuitable to address the issue of lack of an inventive step in view of D1.

51. The Board, therefore, sees no reason to admit any of Auxiliary requests 1 to 6 into these appeal proceedings (Article 12(4) and 12(6) RPBA).

Auxiliary request 7

52. Auxiliary request 7 was filed after notification of the communication under Article 15(1) RPBA.

53. It is an amendment to the appellant's appeal case, in the sense of Article 13(1) RPBA, first sentence, the admission of which is also at the discretion of the Board, subject to stringent provisions (Article 13 (1) and (2) RPBA).

54. Under Article 13(2) RPBA, amendments made after notification of the communication under Article 15(1) RPBA, *shall, in principle, not be taken into account unless there are exceptional circumstances, which have been justified by cogent reasons by the party concerned.*

55. Under Article 13(1) RPBA, *Article 12(4) to (6) RPBA shall apply mutatis mutandis* and the Board shall exercise its discretion *in view of, inter alia, ... the suitability of the amendment to resolve the issues ...*

56. The fact that the preliminary opinion of the Board was different from the conclusion of the Opposition Division does not constitute exceptional circumstances. That possibility is inherent in appeal proceedings.

57. The Board, furthermore, fails to recognise the amendment as being suitable for overcoming the issue of lack of an inventive step in view of D1, in essence for

the same reason as already indicated above with regards to auxiliary request 4.

58. The Board, therefore, sees no reason to admit Auxiliary requests 7 into appeal proceedings (Article 13(1) and 13(2) RPBA).

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The patent is revoked.

The Registrar:

The Chairman:



D. Meyfarth

P. Scriven

Decision electronically authenticated