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Datasheet for the decision of 5 December 2018

Case Number: T 0562/16 - 3.5.05

Application Number: 05012617.6

Publication Number: 1626532

IPC: H04L12/28

Language of the proceedings: ΕN

Title of invention:

Wireless building control architecture

Patent Proprietor:

CF Magnus LLC

Opponent:

WAGO Kontakttechnik GmbH & Co. KG

Headword:

CF Magnus/Building wireless control system

Relevant legal provisions:

EPC Art. 56, 123(2), 123(3)

Keyword:

Inventive step - (yes)

Amendments - extension beyond the content of the application as filed (no) - broadening of claim (no)

Decisions cited:

T 1149/97

Catchword:



Beschwerdekammern Boards of Appeal Chambres de recours

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Case Number: T 0562/16 - 3.5.05

D E C I S I O N

of Technical Board of Appeal 3.5.05

of 5 December 2018

Appellant: CF Magnus LLC

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Decision under appeal: Decision of the Opposition Division of the

European Patent Office posted on 12 February 2016 revoking European patent No. 1626532

pursuant to Article 101(3)(b) EPC.

Composition of the Board:

F. Blumer

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Summary of Facts and Submissions

I. This appeal is against the decision of the opposition division, dispatched on 12 February 2016, to revoke European patent No. 1 626 532. The opposition was based on the grounds of Article 100(a) EPC and the patent was revoked for lack of inventive step (Article 56 EPC) of the subject-matter of the claims as amended during the oral proceedings, having regard to the disclosure of

D2: WO 99/17477 in combination with

D7: WO 03/061175.

- II. The proprietor's notice of appeal was received on 8 March 2016 and the appeal fee was paid on the same day. The statement setting out the grounds of appeal was received on 10 May 2016. The proprietor (appellant) requested that the decision of the opposition division be set aside and that the patent be maintained on the basis of the main request filed during oral proceedings before the opposition division on 26 January 2016, or on the basis of first and second auxiliary requests filed with the statement setting out the grounds of appeal. Oral proceedings were also requested.
- III. By letter of response dated 20 July 2016, the respondent (opponent) requested that the appeal be dismissed for non-compliance with Article 123(2) EPC, and lack of inventive step with respect to the combination of D2 with D7, of both the main request and the first auxiliary request. Further, the respondent requested that the second auxiliary request not be admitted into the proceedings for lack of convergence of its subject-matter with the first auxiliary request. Alternatively, the respondent requested that the second

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auxiliary request not be allowed for lack of compliance with Article 123(2) EPC and lack of inventive step with respect to the combination of D2 with D7. Oral proceedings were requested on an alternative basis.

- IV. A summons to oral proceedings was issued on 16 March 2018.
- V. By letter dated 18 September 2018, the appellant submitted a new main request and new first to third auxiliary requests. The appellant maintained the previous first and second auxiliary requests filed on 10 May 2106 as new fourth and fifth auxiliary requests, respectively, and provided arguments in respect of all the requests.
- VI. In a communication dated 10 October 2018, the board listed the points to be discussed during the oral proceedings. It noted that the appellant had not provided any argument in respect of the admissibility of the first to third auxiliary requests and stated that it was common ground in the submissions of the parties that D2 represented the closest prior art.
- VII. By letter dated 29 October 2018, the respondent raised objections under Articles 123(2), 84 and 56 EPC against the main request. The respondent also objected to the admissibility of the auxiliary requests for lack of convergence.

With respect to the first and second auxiliary requests, the respondent questioned their admissibility under Article 13(1) RPBA and raised objections under Articles 123(2) and (3), 84 and 56 EPC.

With respect to the third auxiliary request, the respondent questioned its admissibility under Article 13(1) RPBA and raised objections under

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Articles 123(2) and 56 EPC.

With respect to the fourth auxiliary request, the respondent raised objections under Articles 123(2) and 56 EPC.

With respect to the fifth auxiliary request, the respondent raised objections under Articles 123(2) and (3) and 56 EPC.

- VIII. By letter dated 5 November 2018, the appellant maintained the main request and the first auxiliary request and submitted new second to sixth auxiliary requests, wherein the new third and fifth auxiliary requests corresponded to the previous second and third requests. As to seventh and eighth auxiliary requests, the appellant requested that a patent be granted based on the first and second auxiliary requests as filed with the statement setting out the grounds of appeal.
- IX. By letter dated 30 November 2018, the respondent objected to the admissibility of the auxiliary requests for lack of convergence.

With respect to the first auxiliary request, the respondent once again questioned its admissibility under Article 13(1) RPBA and again raised objections under Articles 123(2) and (3), 84 and 56 EPC.

With respect to the second auxiliary request, the respondent also questioned its admissibility under Article 13(1) RPBA and raised objections under Articles 123(2), 84 and 56 EPC.

With respect to the third auxiliary request, the respondent also questioned its admissibility under Articles 13(1) and (3) RPBA and raised objections under Articles 123(2) and (3), 84 and 56 EPC.

With respect to the fourth auxiliary request, the respondent also questioned its admissibility under

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Article 13(1) RPBA and raised objections under Articles 123(2) and (3) and 56 EPC.

With respect to the fifth auxiliary request, the respondent also questioned its admissibility under Article 13(1) RPBA and raised objections under Articles 123(2) and 56 EPC.

With respect to the sixth auxiliary request, the respondent also questioned its admissibility under Article 13(1) RPBA and raised objections under Articles 123(2), 84 and 56 EPC.

With respect to the seventh auxiliary request, the respondent raised objections under Articles 123(2) and 56 EPC.

With respect to the eighth auxiliary request, the respondent raised objections under Articles 123(2) and (3) and 56 EPC.

X. Oral proceedings were held as scheduled on 5 December 2018 during which, inter alia, the objections under Articles 123 and 56 EPC were discussed with respect to the main request. During the proceedings and after the board had given its preliminary opinion on these objections, the respondent made the procedural request that Figure 3 of D2 be mentioned and dealt with in the written decision. This procedural request was not admitted by the board.

The appellant requested that the decision under appeal be set aside and that the patent be maintained on the basis of any one of the following requests:

- main request and first auxiliary request as filed by letter dated 18 September 2018;
- second to sixth auxiliary requests, filed as "new second auxiliary request" to "new sixth auxiliary request" by letter dated 5 November 2018;
- seventh and eighth auxiliary requests, filed as

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"first auxiliary request dated May 10, 2016" and "second auxiliary request dated May 10, 2016" with the statement setting out the grounds of appeal dated 10 May 2016.

The respondent requested that the appeal be dismissed.

At the end of the oral proceedings, the decision of the board was announced.

XI. Claim 1 of the main request reads as follows:

"A control system for wireless building automation control, the control system comprising: a first wireless network (14) in a building having a first wireless communications protocol; and a second wireless network (12) in the building having a second wireless communications protocol, the first wireless communications protocol different than the second wireless communications protocol; the system being characterised in that the first wireless network (14) is operable to control, free of communications with the second wireless network (12) and free of an intervening controller, building components in response to sensors, wherein sensors and building components communicate directly in the first wireless network (14) and wherein the first wireless network (14) is also operable to control the building components in response to data from the second wireless network (12)."

The main request comprises a further independent claim (claim 15) for a corresponding method.

Considering the outcome of the decision, the details of the first to eighth auxiliary requests do not need to

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be mentioned.

Reasons for the Decision

- 1. The appeal is admissible.
- 2. Main request
- 2.1 Admissibility

This request was filed by letter dated 18 September 2018, i.e. after the oral proceedings had been arranged.

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It differs, however, from the request on which the decision is based only in that the reference signs in claims 2 to 35 have been amended to correctly refer to the first and second wireless networks, as in claim 1.

The board therefore holds that this request is admissible under the provisions of the RPBA.

2.2 The following numbering of the features of claim 1 was adopted during the proceedings:

Feature 1.1

A control system for wireless building automation control, the control system comprising:

Feature 1.2

a first wireless network (14) in a building having a first wireless communications protocol; and Feature 1.3

a second wireless network (12) in the building having a second wireless communications protocol,

Feature 1.4

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the first wireless communications protocol different than the second wireless communications protocol;

the system being characterized in that

Feature 1.5

the first wireless network (14) is operable to control, free of communications with the second wireless network (12) and

Feature 1.5'

free of an intervening controller, building components in response to sensors, wherein sensors and building components communicate directly in the first wireless network (14), and

Feature 1.6

and wherein the first wireless network (14) is also operable to control the building components in response to data from the second wireless network {12).

- 2.3 Articles 123(2) and 123(3) EPC
- 2.3.1 The respondent raised the objection that feature 1.5' extends beyond the application as originally filed (Article 123(2) EPC) since paragraph [0010] of the application as originally filed, which was the basis for feature 1.5', had been deleted following a proposal from the examining division and with the agreement of the appellant during the examination proceedings, and a reintroduction of this paragraph was not allowed, according to T 1149/97 (OJ EPO 2000, 259).

The respondent further argued that paragraph [0070] of the originally filed application does not support a control of the building components "free of an intervening controller", but rather a control "free of - 8 - T 0562/16

routing by a controller or other structure" (Article 123(2) EPC).

Further, the respondent raised the objection that claim 15 as originally filed, which could support a control of the building components "free of an intervening controller", actually specifies that building components may be controlled free of an intervening controller in a time period different from a time period where the building components are controlled by an intervening controller, whereas feature 1.5' of claim 1 covers a configuration in which the first wireless network is operable to control building components free of an intervening controller and concurrently also in response to data from the second wireless network, which is received from an intervening controller. Feature 1.5' thus involves, in the respondent's view, an intermediate generalisation (Article 123(2) EPC).

Moreover, the respondent objected during the oral proceedings that since an intervening controller was not defined in claim 1 as granted, present claim 1 contravenes the requirements of Article 123(3) EPC.

2.3.2 The board however holds that the skilled person understands from the whole application that the two control modes are mutually exclusive for a single building component. This is also clearly supported by claim 1 as originally filed which does not comprise a reference to time periods.

Further, the board agrees with the appellant that paragraphs [0067] and [0070] both provide an implicit support for a control of building components free of an intervening controller. The wordings "without an

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intervening controller" used in [0067] and [0070] and "free of routing by a controller" used in [0070] have, for the skilled person, the same technical meaning related to the control of building components without the operation of any controller of the second network defined as such in the patent. Moreover, the originally filed claim 15, which comprises exactly the same definition of the method as the deleted paragraph [0010], explicitly specifies that a control "without an intervening controller" (see line 10) is a control "free of the intervening controller" (see lines 15 and 16). These features were maintained in claim 15 as granted, and paragraph 12 of the patent specification makes an explicit reference to this claim. Thus, the board is satisfied that this subject-matter was not abandoned by the deletion of paragraph 10 as originally filed.

For these reasons, the board judges that claim 1 meets the requirements of Article 123(2) EPC.

As to the objection under Article 123(3), the board agrees with the appellant that adding the wording "and free of an intervening controller" to claim 1 as granted represents, due to the use of the term "and", a narrowing of the scope. Since an intervening controller is clearly described as not being a controller associated with a sensor or an actuator (see in particular paragraph [0063]), the present wording of claim 1 now clearly excludes from the scope of the claim all the control systems wherein the control of building components by the first wireless network, free of communication with the second wireless system, is performed by using a controller not associated to a sensor or an actuator.

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Therefore the board judges that claim 1 meets the requirements of Article 123(3) EPC.

2.4 Article 56 EPC

2.4.1 It was common ground in the written and oral submissions of both the appellant and the respondent that D2 represents the closest prior art to the subject-matter of claim 1. D2 discloses (see Figure 1) a wireless building automation hierarchical network wherein devices 124 and 126 are controlled through a first wireless network using router 116 by a controller 112 communicating with router 116 through a second wireless network. Both parties have also agreed that, as stated in the decision, the subject-matter of claim 1 differs from the disclosure of D2 by at least features 1.5 and 1.5'.

The technical effect of features 1.5 and 1.5' is that the building components can, as another option, be controlled within the first wireless network, without any involvement of the second wireless network. Due to the presence of the two alternative control modes, a failure of one of the first and second networks does not stop the system from being able to control the building components. A more reliable control scheme is thus achieved (see paragraph [0008] of the patent, lines 48 to 51).

The objective technical problem can thus be formulated, as agreed by the parties, as how to improve the reliability of the control system.

The opposition division considered that the skilled person, starting from D2 and trying to solve this

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problem, would combine D2 with D7 and arrive at the subject-matter of claim 1.

D7 discloses (see Figure 2) a hierarchical building automation network of sensors, actuators, cluster heads and panel stations. A first radio network ("Sensor/Actuator Network") is provided for communication between sensors/actuators and cluster heads, and a second radio network ("Cluster Head Network") is provided for communication between cluster heads and between cluster heads and panel stations. It is mentioned in a single place in D7 (see page 7, the sentence bridging lines 14 and 15) that the cluster heads may also perform sensor or actuator functions.

The appellant argued that the skilled person would not be prompted to combine D2 with D7, since the structures of both systems are different: in D2 a central station ("controller 112" in Figure 1) controls the second wireless network, whereas in D7 the second wireless network is not controlled by a central station but by several panel stations ("Panel" in Figure 2).

However, even if the skilled person were to combine D2 with D7 in the way suggested by the respondent, i.e. by replacing the router 116 in D2 by a cluster head of D7 having the additional capability of performing sensor or actuators functions (see D7, page 7, lines 14 to 15), they would not arrive at the subject-matter of claim 1 for the following reasons. D7 discloses that a cluster head always retains its function as network control node (see page 7, line 14) belonging to the second wireless network and performs a routing function. Thus, even when such a cluster head performs a sensor function for controlling an actuator (i.e. performs as a sensor in the sense of claim 1) or

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performs an actuator function controlled by a sensor (i.e. performs as a building component in the sense of claim 1), the control of the building components cannot be considered to be "free of communications with the second wireless network" and "free of an intervening controller", as required by features 1.5 and 1.5'.

Further, as plausibly argued by the appellant, the reliability of the system would not be improved since the control of the building components would always involve components, namely the cluster heads, of the second wireless network. For instance, if a cluster head experiences a power failure, its additional sensor or actuator functions will be impacted.

2.4.2 The respondent repeatedly argued that a cluster head of D7, when performing sensor or actuator functions, cannot be considered as an intervening controller in the sense of feature 1.5'. For that the respondent relied on paragraph [0063] of the patent which makes a distinction between "controllers associated with the sensors and actuators" and "separate or intervening controller". The board is, however, not convinced by this argument since the only passage of D7 disclosing that cluster heads may perform sensor or actuator functions reads: "Cluster heads are dedicated network control nodes. They may additionally but not necessarily perform sensor or actuator functions" (D7, page 7, lines 14 and 15, emphasis added). This passage thus clearly teaches that a potential functioning of a cluster head as sensor or actuator does not remove its routing function.

Further, the respondent pointed to paragraphs [0028], [0039] and [0043] of the patent which describe that component 18 of Figure 1 has more functionalities than

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the sensors 16 and actuators 20 and is thus comparable to a cluster head of D7. The skilled person would thus be prompted to replace component 18 by a cluster head. The board however agrees with the appellant that these passages clearly show that component 18 is an actuator and part of the first network, not a controller.

- 2.4.3 For these reasons, the board judges that the subjectmatter of claim 1 involves an inventive step, having
 regard to the disclosure of D2 and D7 (Article 56 EPC).

 Independent claim 15 comprises all the features of
 claim 1 but expressed in terms of a method claim. Thus,
 claim 15 does also meet the requirements of
 Article 56 EPC. Claims 2 to 14 and 16 to 35 are
 dependent claims and, as such, also meet the
 requirements of Article 56 EPC.
- 3. Respondent's procedural request concerning Figure 3 of D2

At the end of the oral proceedings, the respondent asked whether the board would refer, in its written decision, to Figure 3 of document D2. According to the respondent, the router shown in Figure 3 has an actuator functionality and this information could be relevant for the inventive-step assessment.

The appellant argued that any argument based on Figure 3 of D2 would be late-filed.

The board notes that Figure 3 of D2 had never been mentioned before in any of the respondent's written or oral submissions.

Taking into account that there is no legal basis for requesting that details unrelated to the reasons of a

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decision be referred to in the written decision, the board has decided not to admit the respondent's procedural request concerning Figure 3 of D2 into the proceedings.

Order

For these reasons it is decided that:

- 1. The decision under appeal is set aside.
- 2. The case is remitted to the opposition division with the order to maintain the patent on the basis of the main request (claims 1 to 35) as filed with letter dated 18 September 2018 and a description and drawings yet to be adapted.

The Registrar:

The Chair:



K. Götz-Wein

A. Ritzka

Decision electronically authenticated