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### Datasheet for the decision of 8 May 2024

Case Number: T 0430/22 - 3.5.03

Application Number: 18721926.6

Publication Number: 3610336

IPC: G05B15/02, G06Q10/06, G06Q10/04

Language of the proceedings: EN

#### Title of invention:

Building management system with space profiles

#### Applicant:

Johnson Controls Technology Company

#### Headword:

Space profiles/JOHNSON

#### Relevant legal provisions:

EPC Art. 56

RPBA 2020 Art. 12(4), 12(6) sentence 2, 13(2)

#### Keyword:

Inventive step - main request (no): distinguishing features
relate to an administrative concept
Admittance of claim amendments filed after board's
communication - auxiliary request I (no): no exceptional
circumstances
Admittance of claim requests filed with the appeal - auxiliary
requests II and III (no): no reasons for late-filing provided
+ "fresh case"

#### Decisions cited:

T 2613/18



# Beschwerdekammern Boards of Appeal Chambres de recours

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Case Number: T 0430/22 - 3.5.03

DECISION
of Technical Board of Appeal 3.5.03
of 8 May 2024

Appellant: Johnson Controls Technology Company

(Applicant) 2875 High Meadow Circle

Auburn Hills, MI 48326-2773 (US)

Representative: Meissner Bolte Partnerschaft mbB

Patentanwälte Rechtsanwälte

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Decision under appeal: Decision of the Examining Division of the

European Patent Office posted on 30 September 2021 refusing European patent application No. 18721926.6 pursuant to Article 97(2) EPC.

#### Composition of the Board:

Chair K. Bengi-Akyürek
Members: J. Eraso Helguera

R. Romandini

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#### Summary of Facts and Submissions

- I. The appellant lodged an appeal against the decision of the examining division to refuse the present European application. The ground for the refusal was lack of inventive step (Article 56 EPC) in respect of a main request and auxiliary request 1. Auxiliary requests 2 to 7 were not admitted into the examination proceedings (Rule 137(3) EPC).
- II. The decision under appeal referred, inter alia, to the following prior-art document:
  - D1: US 2008/0281472 A1.
- III. Oral proceedings before the board were held on 8 May 2024.

The appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of the claims of any of the following claim requests:

- the main request on which the decision under appeal was based, re-submitted with the statement of grounds of appeal,
- auxiliary request I (labelled "Auxiliary Request IV"), filed during the oral proceedings before the board,
- auxiliary requests II and III, filed with the statement of grounds of appeal.

At the end of those oral proceedings, the board announced its decision.

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#### IV. Claim 1 of the main request reads as follows:

"A building management system (600) for managing one or more places (708) that include one or more spaces (704), comprising:

- a plurality of devices (706) of building equipment that operate across multiple building equipment domains, each of the plurality of devices (706) serving one or more of the spaces (704);
- a control engine (1902) configured to, for each space (704):
  - associate the space (704) with a first group of the plurality of devices (706) of building equipment, the first group comprising multiple devices (706) that serve the space (704) and that operate across the multiple building equipment domains;
  - select a space profile (2102-2110, 1500) from a plurality of space profiles (2102-2110, 1500), at least two of the space profiles (2102-2110, 1500) associated with a different type of space (704) serving a different function, and at least two of the space profiles (2102-2110, 1500) comprising settings for the multiple devices (706) of the first group; and
  - in response to selecting the space profile (2102-2110, 1500), distribute the settings defined by the selected space profile (2102-2110, 1500) to the multiple devices (706) of the first group, wherein distributing the settings causes the multiple devices (706) of the first group to operate in accordance with the settings defined by the selected space profile (2102-2110, 1500)."

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Claim 1 of auxiliary request I (labelled "Auxiliary Request IV") differs from claim 1 of the main request in the following addition at the end of the claim:

- ", wherein the control engine (1902) is further configured to:
- receive an indication that two or more of the spaces (704) have been combined to form a place (708) that contains the two or more spaces (704);
- associate the place (708) with the first group or a second group of the plurality of devices (706) of building equipment, the second group comprising multiple devices (706) that serve the place;
- select a place profile (2102, 1550) comprising settings for the multiple devices (706) that serve the place, the place profile (2102, 1550) selected from among a plurality of place profiles (2102, 1550) each associated with a different type of place (708) serving a different function;
- automatically switch from using space profiles (2102-2110, 1500) for each of the two or more spaces (704) to using the place profile (2102, 1550) for the place (708) that contains the two or more spaces (704); and
- in response to switching to the place profile (2102, 1550), distribute the settings defined by the place profile (2102, 1550) to the multiple devices (706) that serve the place".

Claim 1 of auxiliary request II differs from claim 1 of the main request in the deletion of "and" before the phrase "in response to selecting" and the following addition at the end of the claim: - 4 - T 0430/22

#### "; and

- operate the multiple devices (706) of the first group based on the distributed settings of the selected space profile (2102-2110, 1500), wherein the control engine (1902) is configured to select the space profile (2102-2110, 1500) by:
- identifying a type of place (708) within which the space (704) is contained;
- identifying a purpose or use of the space (704); and
- selecting the space profile (2102-2110, 1500) based on both the type of place (708) within which the space (704) is contained and the purpose or use of the space (704)".

Claim 1 of auxiliary request III differs from claim 1 of auxiliary request II in the deletion of:

#### "; and

- operate the multiple devices (706) of the first group based on the distributed settings of the selected space profile (2102-2110, 1500),"

and in the following addition at the end of the claim:

", and wherein the multiple devices (706) of the first group are controlled to be operated based on the settings of the selected space profile (2102-2110, 1500)".

#### Reasons for the Decision

#### 1. MAIN REQUEST

Claim 1 of the **main request** comprises the following limiting features (board's outline):

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A building management system for managing one or more places that include one or more spaces, comprising: a plurality of devices of building equipment that operate across multiple building equipment domains, each of the plurality of devices serving one or more of the spaces; a control engine configured to, for each space:

- (a) associate the space with a first group of the plurality of devices of building equipment, the first group comprising multiple devices that serve the space and that operate across the multiple building equipment domains;
- (b) select a space profile from a plurality of space profiles, at least two of the space profiles associated with a different type of space serving a different function, and at least two of the space profiles comprising settings for the multiple devices of the first group;
- (c) in response to selecting the space profile, distribute the settings defined by the selected space profile to the multiple devices of the first group, wherein distributing the settings causes the multiple devices of the first group to operate in accordance with the settings defined by the selected space profile.
- 1.1 Claim 1 inventive step (Article 56 EPC)

Starting point and distinguishing features

1.1.1 The appellant did not dispute the suitability of document D1 as a starting point for the assessment of inventive step. At any rate, D1 explicitly concerns a building automation system. Using the wording of claim 1, D1 discloses: - 6 - T 0430/22

A building management system (abstract: "building automation system") for managing one or more places ("rooms") that include one or more spaces ([0029]: "... each room shall be divided into one or more environmental zones ..."), comprising:

a plurality of devices ("devices") of building equipment that operate across multiple building equipment domains, each of the plurality of devices serving one or more of the spaces ([0029] and [0030]);

a control engine ("Smart Building Framework"; [0026]) configured to, for each space:

- (a) associate the space ("environmental zone") with a first group of the plurality of devices of building equipment ("devices installed in the zone"), the first group comprising multiple devices that serve the space and that operate across the multiple building equipment domains ([0029] and [0030]);
- (b) select a space profile ("active environmental profile") from a plurality of space profiles ([0029]: "... only one environmental profile shall be active in an environmental zone ..."), at least two of the space profiles associated with a different type of space serving a different function, and at least two of the space profiles comprising settings for the multiple devices of the first group;
- (c) in response to selecting the space profile, distribute the settings defined by the selected space profile to the multiple devices of the first group, wherein distributing the settings causes the multiple devices of the first group to operate in accordance with the settings defined by the selected space profile ([0030]: "... The system

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receives information about environmental parameters of the environmental zone, and influences these parameters through devices installed in the zone ...").

- 1.1.2 The appellant submitted that document D1 failed to disclose at least features (b) and (c). First of all, paragraphs [0029] and [0030] of document D1 related to different embodiments of document D1. Apart therefrom, paragraph [0030] did not unambiguously and directly teach feature (c). Feature (c) recited that in response to selecting the space profile, the settings defined by the selected space profile were distributed to the multiple devices of the first group. Since document D1 failed to disclose any selection of space profiles as recited by feature (b), feature (c) could not be unambiguously and directly derivable from document D1, because feature (c) defined the selecting step of feature (b) more precisely.
- 1.1.3 The board disagrees. Firstly, the appellant has not substantiated why paragraphs [0029] and [0030] of document D1 should relate to different embodiments. In fact, paragraph [0030] explicitly provides "[o]ther definitions which relate to basic concepts of a preferred embodiment of the present invention". In the board's view, these definitions equally apply to the "system", "environmental zone", "environmental profile" and "devices" addressed in the preceding paragraph [0029]. Secondly, D1 operates on the basis of "environmental profiles" (corresponding to the claimed "space profiles"), of which only one shall be active in an environmental zone.

The following factors influence an "active environmental profile" in the environmental zone (cf.

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#### paragraph [0029]):

- 1) environmental preferences of the users present in the environmental zone,
- 2) default environmental profile of the zone,
- 3) commands from the Inference Engine, and
- 4) commands from the administrator.

In the board's view, this amounts to a selection of a respective (active) environmental profile for each environmental zone. The system thus strives to maintain environmental parameters of the zone within a given range from the values specified by the selected (active) environmental profile (cf. paragraph [0030]). Hence, D1 also discloses feature (c). However, none of these sets of preferences is said to be associated with a specific "type of space". Since "two of the space profiles" are not necessarily associated "with a different type of space serving a different function", document D1 fails to disclose only feature (b).

Technical effect and objective technical problem

1.1.4 The appellant submitted that the claimed systems and methods eliminated the barriers between domain-specific systems, unifying all domains into a unified control system facilitating the exchange of data, controls and resources across all components and domains of the building management system. Thus, the devices were "controlled in a more efficient, simpler and yet swiftly adaptable manner requiring a reduced number of components, as, e.g., sensors might be shared between different domains, while at the same time addressing the mission and goals of the space".

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Accordingly, features (b) and (c) contributed to the invention's technical character by operating the devices of the first group according to the settings distributed by the "selected space profile". This approach reduced the required technical equipment and was not limited to a specific building equipment domain. In this way, it could also simplify control and facilitate a simple and more efficient operation of the technical equipment taking into account the goal-mission of the space.

1.1.5 The board nonetheless endorses the examining division's inventive-step analysis set out in Reasons 1.1 of the decision under appeal. Feature (b) does not credibly bring about any of the technical effects mentioned by the appellant. Rather, the board agrees with the examining division that the association of different "space profiles" with "different types of space" serving a "different function" is related to a mere user preference based on administrative considerations. Hence, applying the well-established COMVIK approach, the underlying non-technical aim can legitimately be incorporated into the objective technical problem as a constraint that has to be met. As a consequence, in the present case, the objective technical problem may be framed as "how to modify or adapt the system of D1 so that at least two of the space profiles associated with a different type of space serve a different function, and at least two of the space profiles comprise settings for the multiple devices of the first group".

Obviousness

1.1.6 Document **D1** already discloses "different types of space" serving "different functions": "Small Cubicle" (cf. Fig. 14), "work area", "lab", "meeting

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room" (Figs. 16 to 20). The implementation of this administrative constraints in the system of D1 would thus have been straightforward. For example, by associating different "default environmental profiles" - which would influence the corresponding active environmental profile - with the different types of space serving different functions.

1.2 It follows that the main request is not allowable under Article 56 EPC.

#### 2. AUXILIARY REQUEST I

Claim 1 of auxiliary request I (labelled "Auxiliary Request IV") comprises all the limiting features of claim 1 of the main request and the following additional features (board's outline):

the control engine is further configured to:

- (g) receive an indication that two or more of the spaces have been combined to form a place that contains the two or more spaces;
- (h) associate the place with the first group or a second group of the plurality of devices of building equipment, the second group comprising multiple devices that serve the place;
- (i) select a place profile comprising settings for the multiple devices that serve the place, the place profile selected from among a plurality of place profiles each associated with a different type of place serving a different function;
- (j) automatically switch from using space profiles for each of the two or more spaces to using the place profile for the place that contains the two or more spaces;

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- (k) in response to switching to the place profile, distribute the settings defined by the place profile to the multiple devices that serve the place.
- 2.1 Admittance into the appeal proceedings (Article 13(2) RPBA)
- 2.1.1 The claims of auxiliary request I were filed during the oral proceedings before the board, i.e. <u>after</u> notification of the board's communication under Article 15(1) RPBA.
- 2.1.2 Hence, the admittance of this request is governed by Article 13(2) RPBA. According to this provision, any amendment to a party's appeal case is not taken into account, unless there are exceptional circumstances, which have been justified with cogent reasons by the party concerned.
- 2.1.3 In support of the admittance of auxiliary request I the appellant submitted that claim 1 of this claim request corresponded to claims 1 and 2 of the main request. This was an appropriate reaction to the board's understanding of "type of space" in feature (b), as the appellant came to realise during the oral proceedings before the board. The new independent claim 1 further clarified that features (b) and (c) were not directly and unambiguously derivable from D1. Since dependent claim 2 of the main request had been considered by the decision under appeal (cf. Reasons 3), this claim request did not present a "fresh case". Further, it was prima facie allowable and did not increase the technical and procedural complexity of the case. Thus, the requests met the "exceptional circumstances" criterion within the meaning of Article 13(2) RPBA. As

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a consequence, the board should admit it and either allow it or at least remit it to the examining division for further prosecution.

- 2.1.4 These arguments fail to convince the board. The verbal exchange during oral proceedings may have helped the appellant gain a better understanding of the board's position. However, this does not justify per se the filing of a further claim request (cf. T 2613/18, Reasons 4.2.4 by the present board in the same composition). Furthermore, "clear allowability" is not an "exceptional circumstance" within the meaning of Article 13(2) RPBA. While the lack of "clear allowability" justifies non-admittance, its presence alone is insufficient for admitting a late-filed claim request into the proceedings under Article 13(2) RPBA. Only for the sake of completeness, the board also notes that the appellant has failed to explain how the addition of the features of former dependent claim 2 contributes to overcoming the outstanding objections.
- 2.2 Accordingly, there are no "exceptional circumstances", which have been justified with "cogent reasons" in the present case. Thus, the board did not admit auxiliary request I into the appeal proceedings (Article 13(2) RPBA).
- 3. AUXILIARY REQUESTS II AND III

Claim 1 of each of auxiliary requests II and III comprises all the limiting features of claim 1 of the main request and the following additional features (board's outline):

(d) the control engine is configured to select the space profile by: - 13 - T 0430/22

- identifying a type of place within which the space is contained;
- identifying the purpose or use of the space;
- selecting the space profile based on both the type of place within which the space is contained the purpose or use of the space [auxiliary requests II and III];
- (e) [the control engine is configured to] operate the multiple devices of the first group based on the distributed settings of the selected space profile [auxiliary request II];
- (f) the multiple devices of the first group are controlled to be operated based on the settings of the selected space profile [auxiliary request III].
- 3.1 Admittance into the appeal proceedings (Article 12(4) and (6) RPBA)
- 3.1.1 First, the appellant has not provided any reasons for submitting these requests only on appeal, as required by Article 12(4), third sentence, RPBA. For this reason alone, these requests are not to be admitted into the appeal proceedings.
- 3.1.2 Second, claim 1 of present auxiliary request II and claim 1 of former "auxiliary request 2", on which the decision under appeal is based, differ only in the presence of feature (d) in the former request.

  According to the appellant, this feature was added in claim 1 of present auxiliary request II "to provide converging sets of claims". The examining division assessed the "prima facie allowability" of the then auxiliary request 2 and concluded that the addition of feature (e) resulted prima facie in added subject-

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matter. Consequently, the examining division decided not to admit that request, exercising its discretion under Rule 137(3) EPC. Since feature (d) has no bearing on the discussion about added subject-matter, auxiliary request II cannot suitably address the issue leading to the decision under appeal. Besides, the board considers that the "prima facie allowability" criterion was not applied in an unreasonable manner to the then auxiliary request 2 as forming part of the decision under appeal.

- 3.1.3 Third, the appellant's case as presented in the statement of grounds of appeal with respect to the newly filed auxiliary request III is based on the replacement of feature (e) by feature (f). Thus, auxiliary request III constitutes an attempt to overcome the objections arising from the use of feature (e) in claim 1. This objection had been discussed at length during the examination proceedings. However, the appellant decided not to present further arguments or further claim requests (cf. point 13 of the minutes of the first-instance oral proceedings). Therefore, the board considers that this request could and should have already been filed before the examining division, during the oral proceedings at the latest (cf. Article 12(6), second sentence, RPBA).
- 3.1.4 For completeness, it is noted that auxiliary request II still raises at least prima facie issues under Article 123(2) EPC and that the admittance of auxiliary request III would confront the board with a "fresh case" requiring a complete examination of the compliance at least with Articles 123(2), 84 and 52(1) EPC.
- 3.2 In view of the above, the board did not admit auxiliary requests II and III into the appeal proceedings.

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4. Since there is no allowable claim request on file, the appeal must be dismissed.

#### Order

#### For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chair:



B. Brückner

K. Bengi-Akyürek

Decision electronically authenticated