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**Datasheet for the decision
of 14 February 2025**

Case Number: T 1745/22 - 3.2.03

Application Number: 17184163.8

Publication Number: 3438551

IPC: F24C15/20, F24C7/08, H04L29/08

Language of the proceedings: EN

Title of invention:

REMOTE CONTROL SYSTEM FOR CONTROLLING A KITCHEN HOOD

Applicant:

ELECTROLUX APPLIANCES AKTIEBOLAG

Headword:

Relevant legal provisions:

EPC Art. 56

Keyword:

Inventive step - (yes)

Decisions cited:

Catchword:



Beschwerdekammern

Boards of Appeal

Chambres de recours

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Case Number: T 1745/22 - 3.2.03

D E C I S I O N
of Technical Board of Appeal 3.2.03
of 14 February 2025

Appellant:
(Applicant)

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Representative:

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Decision under appeal:

**Decision of the Examining Division of the
European Patent Office posted on 23 February
2022 refusing European patent application No.
17184163.8 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman

B. Miller

Members:

R. Baltanás y Jorge

F. Bostedt

Summary of Facts and Submissions

I. European patent application No. 17 184 163.8 relates to a remote control system for controlling a kitchen hood.

II. The appeal lies from the decision of the examining division to refuse the above-mentioned European patent application.

The examining division held that neither the subject-matter of claim 1 according to the main request nor that of claim 1 according to auxiliary requests 1 to 4 involved an inventive step (Article 56 EPC).

III. The applicant ("the appellant") filed an appeal against the examining division's decision.

IV. Requests

The appellant requests that the decision under appeal be set aside and that a patent be granted on the basis of the main request as filed with the statement setting out the grounds of appeal or, in the alternative, on the basis of one of auxiliary requests 1 to 4 as also filed with the statement setting out the grounds of appeal.

The claims of the main request and of auxiliary requests 1 to 3 correspond to the claims on which the contested decision is based.

At the request of the Board, the appellant confirmed by a letter dated 21 January 2025 that the adapted description filed with its letter of 19 July 2019

(received on 29 July 2019) was the version belonging to the main request.

V. Claim 1 of the main request reads as follows (with labelling of its features as adopted by the Board; amended features with respect to the originally filed claim 1 are marked in bold):

- a) A remote control system ~~for controlling which is~~ **configured to control** a kitchen hood (10), wherein:
- b) - the remote control system comprises the kitchen hood (10) and at least one cooking appliance (12),
- c) - the remote control system comprises a router (14) and at least one remote device (16),
- d) - the router (14) is connected or connectable to the at least one cooking appliance (12) via a first connection (20),
- e) - the remote device (16) is connected or connectable to the router (14) via a second connection (20), and
- f) - the cooking appliance (12) is connected to the kitchen hood (10) via a third connection (18),
- g) - so that the kitchen hood (10) is controllable by the remote device (16) via the router (14) and the cooking appliance (12).

Claims 2 to 15 relate to preferred embodiments of the remote control system defined in claim 1.

VI. State of the art

The following documents were cited during the examination proceedings and are relevant to this decision:

D1: US 2017/0205077 A1
D2: DE 203 17 217 U1
D3: DE 10 2014 220 273 A1
D4: DE 10 2015 220 830 A1
D5: EP 1 010 949 A2

VII. The appellant's arguments can be summarised as follows.

The subject-matter of claim 1 of the main request did involve an inventive step with respect to D2 in combination with common general knowledge.

The presence of a router was not the only distinguishing feature of claim 1 over D2. When correctly assessing the distinguishing features, it had to be acknowledged that D2 also lacked the first and second connections as defined in contested claim 1. Hence, the subject-matter of claim 1 according to the main request differed from D2 by the following features.

- The remote control system comprises a router (feature c)).
- The router is connected or connectable to the at least one cooking appliance via a first connection (feature d)).
- The remote device is connected or connectable to the router via a second connection (feature e)).
- The kitchen hood is controllable by the remote device via the router (feature g)).

Even though paragraph [0004] of D4 might indeed state that home network devices were known, a single patent document could not constitute proof that certain features were part of common general knowledge. Thus,

the line of argument of the examining division, relying on a combination of D2 with common general knowledge, did not find support in the cited documents.

Paragraph [0008] of D2 mentioned a "*Universalfernbedienung*". However, this so-called universal remote control was intended to facilitate the control of further devices besides the cooking hood of D2. In the context of the overall disclosure of this document, paragraph [0008] had to be construed such that the remote device of D2 was designed in such a way that more than one device could be controlled through the remote device and by means of the control unit of the cooking hob of D2. Accordingly, the universal remote control of D2 only interacted with the control unit of the cooking hob since the overall teaching of this document related to a direct interaction between the remote device and the control unit. Thus, paragraph [0008] of D2 could not be used as a pointer to rely on a router.

D4 did not deal with the advantage of using routers in a home network; it merely described a solution in which home networks were used in the control of a home appliance. D4 dealt with the problem of improving the control of home appliances between the normal use mode and the stand-by mode. Thus, D4 did not contain any pointers towards the solution of the technical problem as defined by the examining division and therefore it could not be deduced that the skilled person would have relied on a router and a first and second connection as defined in contested claim 1. D4 disclosed in paragraph [0034] that the use of a home network was critical. It did not contain any teaching about it being advantageous to use a remote device which might

control the kitchen hood by means of also a router and a first and second connection as defined in claim 1.

Reasons for the Decision

1. Main request - Article 56 EPC

1.1 The examining division considered that the subject-matter of claim 1 of the main request was not inventive when combining D2 with the common general knowledge described in D4.

This is not persuasive for the following reasons.

1.1.1 Features disclosed by D2

The appellant did not contest that document D2 discloses the following features.

A control system which is configured to control a kitchen hood (see paragraph [0004], first sentence) (feature a)), wherein:

- the control system comprises the kitchen hood ("Dunstabzugshaube (1)") and at least one cooking appliance ("Herd (3)") (see the embodiment disclosed in paragraphs [0009] and [0014]) (feature b)), and a control device ("Steuerungselement (4)")
- the cooking appliance (3) is connected to the kitchen hood (1) via a connection (6) (feature f)).

The kitchen hood (1) is controllable by the control device. The control device can be a remote device ("tragbare Fernbedienung", see paragraph [0008] of D2), or it can be positioned in the cooking device (see

paragraphs [0005] and [0013] of D2). Moreover, the control device can be coupled to the control of a stove and can be controlled together with the control of the stove (see paragraphs [0009] and [0017]).

1.1.2 Distinguishing features

The examining division considered that the subject-matter of claim 1 differed from D2 in that the control system comprised a router (feature c)), wherein the router is connected or connectable to the at least one cooking appliance via a first connection (feature d)) and wherein the remote device is connected or connectable to the router via the second connection (feature e)). This is correct and was not contested by the appellant, either.

However, the subject-matter of claim 1 also differs from D2 by a further feature which was not considered by the examining division, namely that the kitchen hood is controllable by the remote device **via the router** and the cooking appliance.

1.1.3 Technical effect and objective technical problem

The examining division considered that the distinguishing feature "router" had the technical effect of *"build[ing] a (home) network with appliances wherein a remote device can control a plurality of these appliances via the network. Therefore, the remote device is more versatile in its use which improves user convenience as different appliances can be controlled"*. The problem to be solved was thus considered to be *"how to provide a remote device which is more versatile in use"*.

This is not correct, however. The distinguishing features are not limited to the mere presence of a router for any undefined purpose (such as controlling several appliances); rather, they encompass the particular use of this router within the context of the rest of the features, i.e. the fact that it is connected or connectable to the cooking appliance and the remote device (features d) and e)), so that the kitchen hood is controllable by the remote device via the router and the cooking appliance (feature g)).

The technical effect of these distinguishing features is that the kitchen hood is controllable by the remote device through a network connection. This solves the objective technical problem of how to allow the control of the kitchen hood from a great distance (see the originally filed application, page 1, lines 16 to 19).

1.1.4 Alleged common general knowledge

The examining division took the view that paragraph [0004] of D4 disclosed that the concept of controlling smart household appliances connected within a home network via a smartphone or tablet was generally known to the skilled person, such that it would have been obvious to the skilled person to **replace** the remote device of D2 with a smartphone or tablet and to upgrade the cooking appliance of D2 so that it could be connected to the smartphone or tablet via a router, thereby arriving at the subject-matter of claim 1.

However, the Board cannot share this view for the following reasons.

The examining division did not explain in the contested decision how, once control device (4) of D2 has been

replaced by a smartphone or tablet, the resulting device could still comprise feature g), i.e. that the kitchen hood is controllable by the control device via the router **and** the cooking appliance. A smartphone or tablet is generally not intended to be part of a cooking appliance, as in the case of the "Steuerungselement (4)" of D2, an aspect which is certainly not disclosed in D4 either.

Document D2 discloses other embodiments where the control device is in fact not part of any cooking appliance but is simply arranged separately from the kitchen hood, such as in a switch board of a room or on a wheelchair (see paragraph [0004] of D2) or as a portable remote control (see paragraph [0008] of D2).

The skilled person considering the use of a smartphone or tablet as a control means for the kitchen hood based on their common general knowledge about home networks for cooking appliances would understand that a smartphone or tablet would have to be used in the manner taught in D2, i.e. as an independent **remote** device not linked to a cooking appliance and acting as an intermediate element in the control of a kitchen hood (which is not part of the above-mentioned common general knowledge). Therefore, the skilled person starting from D2 would not arrive at the subject-matter of claim 1 of the main request in an obvious manner when taking into account their common general knowledge.

1.2 Combination of D2 with other documents cited

1.2.1 D2 in combination with D4

Document D4 addresses a problem relating to household appliances which enter into standby modus after a period of inactivity (see paragraph [0005]). The solution proposed in D4 is to provide different time thresholds for entering into the standby modus, depending on whether the last command was issued by a control module mounted on the household appliance or by a remote control acting via a home network, for example (see paragraphs [0009], [0021], [0022] and [0033]).

Since D4 does not address the technical problem of how to allow the control of household appliances from a great distance, the skilled person will not have any motivation to combine this document with D2.

Furthermore, D4 does not disclose the control of a first household appliance via a second one. The disclosed control system is thus substantially different from the particular embodiment of D2 based on controlling kitchen hood (1) via cooking appliance (3) - see paragraphs [0005] and [0013] of D2; no standby modus is disclosed in relation to these two elements. Thus, even if the skilled person did have reason to consult D4, they would not conclude that the system of D4 is suitable for the purpose of D2.

1.2.2 D2 in combination with D1

The main focus of D1 is the interaction between an electric stove (100) and a cooking utensil (200) (see paragraph [0003]). D1 only discloses the control of a kitchen hood (300) by the electric stove (100) (see paragraphs [0073] and [0074]) and not by the mobile device (400), which is only used to download software

onto the main control unit (110) of the electric stove (100) (see paragraphs [0037] and [0043]).

D1 therefore does not disclose a kitchen hood controllable by a remote device via a router and a cooking appliance and would not lead the skilled person to the subject-matter of claim 1.

For the sake of completeness, the remote control system configured to control the kitchen hood (300) of D1 is comparable to that of D2, and therefore the conclusion regarding inventive step would be the same even if the analysis were to be started from D1.

1.2.3 D2 combined with D3

D3 addresses the problem of measuring the cooking temperature of a receptacle on a cooking appliance (2) (see paragraph [0011]) and discloses as a solution pyrometers (7) arranged on a kitchen hood (3). The kitchen hood (3) comprises a transmitter (9) to transmit the temperature values to the cooking appliance (2) (see paragraph [0045]). A remote device such as a mobile phone (C) is disclosed to communicate a target temperature value to the cooking appliance (2). It is also disclosed that the mobile phone (C) can be used to control the kitchen hood (3) **directly** (see paragraph [0047]). However, it is not disclosed in D3 that this communication is via a router.

Moreover, D3 does not disclose the control of a kitchen hood by a remote device via a router **and** a cooking appliance.

1.2.4 D2 combined with D5

Document D5 discloses - similarly to D2 - a kitchen hood (4) controlled via a cooking appliance (2) (see paragraphs [0017] and [0018]). No connection to a home network or router is disclosed in D5. Consequently, this document cannot change the considerations explained above.

2. Main request - Articles 123(2) and 84 EPC

2.1 The examining division did not raise any objections in respect of added subject-matter (Article 123(2) EPC) or clarity (Article 84 EPC).

2.2 The only amendment in claim 1 with respect to the originally filed claim 1 concerns feature a) (a remote control system **which is configured to control** a kitchen hood) and is disclosed in the content of the originally filed application as a whole, since a remote control system for controlling a kitchen hood (see the originally filed claim 1) is necessarily configured to control the kitchen hood. Thus, the amended claim 1 complies with Article 123(2) EPC.

2.3 The Board sees no reason to object to the clarity of the claims of the main request.

3. Main request - adapted description

3.1 Description to be taken into account

The appellant filed an adapted description corresponding to the main request with its letter dated 19 July 2019.

A further amended description was filed with a letter dated 18 March 2021, corresponding to an auxiliary request also filed therewith.

The examining division appears to have erroneously mixed up the adapted and independently amended descriptions in point I.12 of the decision. Nevertheless, this is irrelevant since no decision was taken on the adapted description of the main request.

The appellant confirmed in the appeal proceedings that it requests the grant of a patent on the basis of the main request as filed with the letter dated 19 July 2019 (received on 29 July 2019), which included the adapted description forming part of the main request according to those submissions.

3.2 Amendments to the description

The following amendments have been made in the description.

- D1, D2 and D3 have been acknowledged as being prior art (see pages 1 and 2).
- The wording "for controlling" has been replaced by the wording "which is configured to control", which is in line with the amended claim 1 (see pages 1 and 2).

These amendments comply with the requirements of Rule 42(1)(b) EPC and Article 84 EPC.

4. Conclusion

In view of the above, a patent can be granted on the basis of the main request (Articles 97(1) and 111(1) EPC).

Order

For these reasons it is decided that:

1. The contested decision is set aside.
2. The case is remitted to the examining division with the order to grant a patent based on the following set of documents:
 - claims 1 to 15 as filed as the main request with the statement setting out the grounds of appeal
 - pages 1 to 7 of the description as filed with the letter dated 19 July 2019
 - Figure 1 as originally filed

The Registrar:

The Chairman:



C. Spira

B. Miller

Decision electronically authenticated