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Datasheet for the decision of 3 March 2026

Case Number: T 1412/23 - 3.5.01

Application Number: 12728461.0

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IPC: H02J3/14, H02J13/00, H04L12/28

Language of the proceedings: EN

Title of invention:
SYSTEM AND METHOD OF OPERATING HOUSEHOLD APPLIANCES

Patent Proprietor:
BSH Hausgeräte GmbH

Opponent:
Harald Ulrich Beratungs- und Beteiligungsgesellschaft UG (haftungsbeschränkt)

Headword:
Synchronized duty cycles/BSH HAUSGERÄTE

Relevant legal provisions:
EPC Art. 100(a), 54, 111(1)
RPBA 2020 Art. 11

Keyword:
Novelty - auxiliary request 3 (yes)
Remittal to the department of first instance - (yes)

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Case Number: T 1412/23 - 3.5.01

D E C I S I O N
of Technical Board of Appeal 3.5.01
of 3 March 2026

Appellant: (Patent Proprietor)	BSH Hausgeräte GmbH Carl-Wery-Strasse 34 81739 München (DE)
Representative:	BSH Hausgeräte GmbH Zentralabteilung Gewerblicher Rechtsschutz Carl-Wery-Strasse 34 81739 München (DE)
Respondent: (Opponent)	Harald Ulrich Beratungs- und Beteiligungsgesellschaft UG (haftungsbeschränkt) Am Schulberg 7 56459 Willmenrod (DE)
Representative:	Jostarndt Patentanwalts-AG Metzgerstraße 61 52070 Aachen (DE)
Decision under appeal:	**Decision of the Opposition Division of the European Patent Office posted on 30 June 2023 revoking European patent No. 2721778 pursuant to Article 101(3)(b) EPC.**

Composition of the Board:

Chairman	M. Höhn
Members:	A. Wahrenberg
	L. Basterreix

Summary of Facts and Submissions

I. The appeal is against the opposition division's decision to revoke European patent No. 2721778.

II. In its decision, the opposition division found that claim 10 of the patent as granted (main request) contained added subject-matter (Article 100(c) EPC), that claim 10 of the first auxiliary request had been amended in violation of Article 123(3) EPC to extend the scope of protection, that claim 1 of both the second and third auxiliary requests lacked novelty (Article 54(1) and (2) EPC) in view of document D8 (US 2010/082176 A1), and that claim 1 of the fourth auxiliary request lacked inventive step (Article 56 EPC) in view of D8.

III. In its statement setting out the grounds of appeal, the appellant (proprietor) requested that the decision to revoke the patent be set aside and that the patent be maintained as granted (main request), or on the basis of one of the first to fourth auxiliary requests on which the decision under appeal was based.

IV. In its reply to the grounds of appeal the respondent (opponent) requested that the appeal be dismissed and that the decision of the opposition division be confirmed. Auxiliarily, the opponent requested that the *prima facie* relevance of D33 (EP 0 727 668 A1) be acknowledged and that the patent be revoked on the basis of this document, or that the case be remitted to the opposition division for consideration of D33.

V. Further written submissions were filed by both parties.

VI. The Board summoned the parties to oral proceedings. In the communication accompanying the summons, the Board indicated that it tended to agree with the opposition division that claim 10 of the main request contained added subject-matter, that claim 10 of the first auxiliary request extended the scope of protection, and that claim 1 of the second auxiliary request lacked novelty over D8. The Board further considered that claim 1 of the third auxiliary request was novel and indicated that it was minded to remit the case to the opposition division for consideration of the remaining grounds of opposition.

VII. The oral proceedings were held by videoconference. At the end of the oral proceedings, the parties confirmed that their final requests remained the same as those set out in the statement of grounds of appeal and in the reply, respectively.

The proprietor agreed to the remittal of the case to the opposition division for further prosecution, while the opponent objected to it.

VIII. Claim 1 of the main request and the first and second auxiliary request reads:

A household appliance (10) comprising:

a primary function unit (3) operable to perform a primary function of the household appliance (10);

a controller (4) operable to control an operation of the primary function unit (3); and

a two-way communication module (6) for trnasmitting [sic] and receiving signals between the controller (4) and a second household appliance,

wherein the controller (4) is operable to control, based on a user interaction with the household appliance (10) or the second household appliance, the operation of the primary function unit (3) based on synchronized duty cycles of the household appliance (10) and the second household appliance as well as on a priority scheme of the household appliance (10) and the second household appliance.

IX. Claim 1 of the third auxiliary request adds the following feature at the end of claim 1 of the main request:

wherein the controller (4) is operable to control, based on the synchronized duty cycles, the operation of the primary function unit (3) such that the household appliance (10) and 20 the second household appliance operate alternating.

X. The arguments of the parties, insofar as relevant, are set out in the Reasons for the Decision.

Reasons for the Decision

1. *Main request, claim 1*

1.1 The claim defines a household appliance (see Figure 1, item 10) that has a primary function unit (3), a controller (4) that manages how that unit operates, and a two-way communication module (6) that can transmit and receive signals with another household appliance ("second household appliance" in claim 1). The controller moreover uses input from a user - either from this appliance or the other one - to control the primary function, and it does so based on "synchronised duty cycles" of the household appliances and by applying a priority scheme.

1.2 In the patent, the term "synchronized duty cycles", as described in paragraph [54] and illustrated in Figure 5, refers to coordinating appliance operation such that when one household appliance is inactive during portions of its cycle, other appliances are permitted to run. This coordinated or "synchronized" operation reduces peak energy demand within the household.

2. *Novelty over D8*

2.1 It is not disputed that D8 discloses a household appliance (Appliance 1 - item 101 in Figure 1) comprising:

a primary function unit operable to perform a primary function of the household appliance (implicit, as noted by the opposition division, as every household appliance necessarily has a primary function);

a controller (HACD1 100) operable to control an operation of the primary function unit (paragraphs

[0014] and [0022]); and

a two-way communication module (RF communication 130 or power line 135) for transmitting and receiving signals between the controller (100) and a second household appliance (Appliance 2, 105; paragraph [0029]).

2.2 D8 further discloses that the controller is operable to control operation of the primary function in response to user interaction with the household appliance (paragraph [34]), for example by allowing the user to manually override the HACD. In addition, paragraph [38] describes "synchronization of duty cycles": in the illustrated example, when the air conditioner is operating, the dryer's operation is delayed until the air conditioner is switched off, thereby avoiding spikes in energy consumption during periods of high demand.

D8 also discloses a priority scheme - modifiable by the user - that defines the energy-saving priority assigned to each household appliance within the network (paragraph [34]).

2.3 The proprietor disputed that D8 disclosed a controller configured to control operation of the primary function unit based on "synchronized duty cycles" of the household appliances. In the proprietor's view, paragraph [38] of D8 described only an adaptive adjustment of duty cycles, which did not amount to a control based on "synchronized duty cycles" within the meaning of claim 1. The proprietor submitted that synchronized duty cycles implied deterministic, program-defined ON/OFF phases, as illustrated in Figure 5, where the timing was predetermined and provided to the controller as an input rather than generated as an

output of the control.

By contrast, in D8 the air conditioner switched ON and OFF adaptively in response to temperature thresholds and therefore did not follow a predetermined schedule. According to the proprietor, such switching behaviour is inherently unpredictable and cannot be synchronized with the operation of other devices.

2.4 The Board does not share the proprietor's interpretation of the claim. The expression "control … based on synchronized duty cycles" is not confined to arrangements in which fixed, predetermined ON/OFF phases are supplied to the controller as an input. Rather, the wording "based on" is broad and encompasses any control scheme in which the synchronization of duty cycles forms the operative principle of the control.

Thus, "based on" does not require that synchronized duty cycles exist independently of the control. It is sufficient that the controller establishes or enforces a relationship between the operating phases of different appliances so as to coordinate their duty cycles. The claim therefore also covers arrangements in which the controller itself brings about a synchronized pattern of operation as an output of its control logic. In this sense, the claim encompasses control that ensures synchronization of duty cycles as described in paragraph [54] of the patent, namely that when one appliance is off, another may operate, thereby avoiding overlapping periods of high energy consumption.

The Board further agrees with the opposition division (decision under appeal, point 5.3) that it would not be technically meaningful to construe the claim as requiring duty cycles to be synchronized a priori. Such

a reading would also be at odds with the claimed control based on user interaction, which is inherently variable and cannot be reconciled with a fixed, predetermined synchronization scheme.

2.5 A control that achieves "synchronized duty cycles", as encompassed by claim 1, is disclosed in D8. In particular, paragraph [38] teaches that when the air conditioner is operating, the dryer's operation is delayed until the air conditioner has cycled off. This establishes a coordinated, non-overlapping relationship between the operating phases of the appliances and thus constitutes control based on synchronized duty cycles within the above interpretation.

Accordingly, the Board finds that the subject-matter of claim 1 lacks novelty over D8. The ground of opposition under Article 100(a) EPC therefore prejudices the maintenance of the patent on the basis of the main request.

3. *First and second auxiliary requests*

4. Claim 1 of the first and second auxiliary requests is identical to claim 1 of the main request. Therefore, also these requests are unallowable for lack of novelty (Article 54 EPC).

5. *Third auxiliary request*

5.1 Claim 1 adds that the controller is operable to control, based on the synchronized duty cycles, the operation of the primary function unit such that the household appliance and the second household appliance

operate alternating.

5.2 The opposition division found that such alternating operation was disclosed in paragraph [38] of D8. It appears that the division considered the alternation to be implicit from its earlier findings on "synchronized duty cycles" in the context of the second auxiliary request.

5.3 On appeal, the proprietor argued that the term "alternating" in claim 1 implied a repeated series of ON/OFF phases as shown in Figure 5 of the patent.

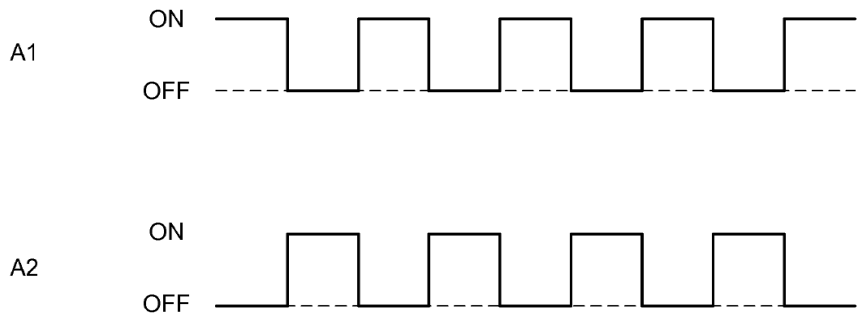

FIG. 5

According to the proprietor, this feature was not disclosed in D8. In its view, D8 merely taught that, when the air conditioner was operating, the dryer's operation could be delayed until the air conditioner has cycled off. This, however, did not imply a recurring or systematic sequence of ON/OFF phases, but rather a one-off or event-driven delay.

5.4 The opponent accepted that an alternating operation of household appliances went beyond mere mutual exclusivity and, to some extent, implies a recurring

sequence of ON phases of the respective primary functions. However, in its view, such recurrence was at least implicitly disclosed in D8.

In particular, the opponent argued that the cooling cycle of an air conditioner inherently comprised multiple ON/OFF phases of its primary function, comparable to the pattern illustrated in Figure 5 of the present patent. Since the air conditioner's ON state was governed by measured temperature, the skilled person would understand that, if the temperature rose above the upper threshold again after a cooling phase, the air conditioner would switch on again. In such circumstances, the dryer's operation would once more be delayed or coordinated accordingly (assuming that the air conditioner has higher priority), thereby giving rise to a repeated, alternating pattern of operation.

The opponent further relied on paragraph [27] of D8, which disclosed that the air conditioner HACD negotiated with peer devices to determine dynamically *how, how often, and when* to reduce power consumption in order to achieve a collective energy-saving target. In the opponent's view, this passage reinforced that the coordination between appliances was inherently repetitive and ongoing, rather than a one-off event.

5.5 The Board considers that such repetitiveness is not directly and unambiguously disclosed in D8. A finding to the contrary would rely on assumptions going beyond the actual content of the disclosure.

In particular, while D8 describes that the dryer's operation is delayed when the air conditioner is operating (paragraph [38]), it does not disclose a recurring or systematic sequence of alternating ON

phases between the appliances. The passage merely describes a conditional response to a given operating state of the air conditioner, without specifying that this coordination is repeated in a cyclical or structured manner over time. The same applies to paragraph [27], which refers in general terms to dynamic power reduction strategies but does not disclose a concrete, recurring alternation of duty cycles between specific appliances.

5.6 For these reasons, the Board considers that the subject-matter of claim 1 of the third auxiliary request is novel over D8.

6. *Remittal to the opposition division*

6.1 The third auxiliary request was rejected solely on the ground of lack of novelty over D8. The opposition division did not address the objection under Article 123(2) EPC raised by the opponent during the opposition proceedings and reiterated in the statement of grounds of appeal (see minutes of the oral proceedings, point 6.1). Moreover, the division did not decide on the admittance of D33 or its relevance to the assessment of novelty.

As appeal proceedings are primarily concerned with reviewing the contested decision (Article 12(2) RPBA), the Board considers that the fact that not all grounds of opposition were examined in the decision under appeal constitutes special reasons within the meaning of Article 11 RPBA. Remittal of the case to the opposition division is therefore appropriate.

The opponent objected to a remittal but did not provide any reasons. The Board therefore sees no substantiated argument against remittal and, exercising its discretion under Article 111(1) EPC in conjunction with Article 11 RPBA 2020, decides to remit the case to the opposition division for further prosecution.

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 for further prosecution.

The Registrar: The Chairman:

T. Buschek M. Höhn

Decision electronically authenticated