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**Datasheet for the decision  
of 5 March 2021**

**Case Number:** T 2672/16 - 3.2.06

**Application Number:** 10196804.8

**Publication Number:** 2319972

**IPC:** D06F37/20

**Language of the proceedings:** EN

**Title of invention:**

Household appliance for treating soft goods with displacement sensor and method for measuring the weight of loaded soft goods

**Patent Proprietor:**

Whirlpool EMEA S.p.A.

**Opponent:**

SCHURACK, Eduard

**Headword:**

**Relevant legal provisions:**

RPBA 2020 Art. 13(1)

EPC Art. 54, 56, 84, 123(2)

**Keyword:**

Late-filed main request - admitted (no)  
Late-filed main request - procedural economy  
Late-filed main request - request clearly allowable (no)  
Novelty - auxiliary request 1 (yes)  
Inventive step - auxiliary request 1 (yes)

**Decisions cited:**

**Catchword:**



**Beschwerdekammern**

**Boards of Appeal**

**Chambres de recours**

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Case Number: T 2672/16 - 3.2.06

**D E C I S I O N**  
**of Technical Board of Appeal 3.2.06**  
**of 5 March 2021**

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**Decision under appeal:** **Decision of the Opposition Division of the  
European Patent Office posted on 27 October 2016  
rejecting the opposition filed against European  
patent No. 2319972 pursuant to Article 101(2)  
EPC.**

**Composition of the Board:**

**Chairman** M. Harrison  
**Members:** P. Cipriano  
W. Ungler

## Summary of Facts and Submissions

- I. An appeal was filed by the appellant (opponent) against the decision of the opposition division rejecting the opposition to European patent No. 2 319 972. It requested that the decision under appeal be set aside and the patent be revoked.
- II. With its response, the respondent (patent proprietor) requested that the appeal be dismissed or, in the alternative, that the patent be maintained according to one of auxiliary requests 1 to 3 (first to third auxiliary requests) filed therewith.
- III. The following documents, referred to by the appellant in its grounds of appeal, are relevant to the present decision:
- E1 JP 6-79098 and translation into English
  - E2 JP 5-26086 and translation into English
  - E3 JP 5-31784 and translation into English
  - E4 JP 6-246087 and translation into English
  - E5 JP 5-84382 and translation into English
  - E6 JP 5-293300 and translation into English
  - E7 JP 5-64695 and translation into English
  - E8 DE 199 50 747 A1
  - E10 JP 2002-35466 and translation into English
  - E11 DE 2 204 325
  - E12 DE 100 22 821 A1
  - E14 Excerpt from "Wörterbuch der Technik", edition 1979, page 680
- IV. The Board issued a summons to oral proceedings and a subsequent communication containing its provisional opinion, in which it indicated *inter alia* that E4 seemed to disclose all the features of claim 11 and

that none of the auxiliary requests seemed to fulfil the requirement of Article 123(2) EPC.

- V. With letter dated 20 March 2020, the respondent filed a new main request as well as new auxiliary requests 1 to 4 replacing its previous requests.
- VI. Oral proceedings were held before the Board on 5 March 2021, in the absence of the appellant as had been announced.

At the close of oral proceedings, the respondent requested that the patent be maintained in amended form on the basis of the main request, or on the basis of the first auxiliary request as filed with letter dated 20 March 2020.

Claim 11 of the main request reads as follows:

"11. Method for measuring the mass or weight of soft goods loaded in a swinging assembly of a washing machine before said soft goods are subjected to a treatment by the washing machine, comprising the following steps:

detecting a relative displacement between two elements of the swinging system, wherein said two elements (3, 4) are telescopically coupled together through two ends, a first of said two ends comprising ferromagnetic material and a second of said two ends comprising a coil (9),

characterized in that: an electronic detection module (6) adapted to detect the relative displacement of the ends of said elements (3, 4) is located on one of said two elements and comprises an oscillator circuit (12) and processing means operationally connected to the oscillator circuit,

an oscillation frequency of the oscillator circuit (12) is measured by the processing means, which oscillation frequency depends on the impedance of said coil (9) located on one of said two elements, said relative displacement is determined by the processing means as a function of said oscillation frequency, wherein the mass or weight of the soft goods loaded in the swinging assembly of the washing machine before said soft goods are subjected to a treatment by the washing machine is associated with the relative displacement."

Claim 1 of auxiliary request 1 (first auxiliary request of 20 March 2020) reads as follows:

"1. Household appliance for treating soft goods, in particular a laundry washing machine, comprising: a swinging assembly elastically constrained to a frame by means of a suspension system comprising a pair of elements (3, 4) telescopically coupled to each other through two respective ends, wherein a first of said two ends comprises ferromagnetic material and a second of said two ends comprises a coil (9), and an electronic detection module (6) adapted to detect a relative displacement of said two ends, characterized in that said electronic module (6) is located on one of said two elements (3, 4) and comprises an oscillator circuit (12), the oscillation frequency of which depends on the impedance of said coil (9), and processing means operationally connected to said oscillator and adapted to measure said oscillation frequency and to determine, as a function of said oscillation frequency, at least one piece of

information which can be associated with said relative displacement,  
said information being the measurement of the mass or weight of the soft goods loaded in said swinging assembly before said soft goods are subjected to a treatment, in particular a wash treatment."

VII. The appellant's arguments may be summarised as follows:

*Auxiliary request 1 - novelty*

The subject-matter of claim 1 was not novel. E1, E2, E3, E4, E5, E6, E7 and E10 disclosed all the features of claim 1 of auxiliary request 1.

The claim wording left open the possibility of the module being only partially located on one of the elements such that, for example, the processing means did not need to be located on one of the telescopically coupled elements.

Further, Figure 2 of E1 only displayed an electrical circuit and not the physical arrangement of the various electrical components such that a separation between the displacement detection unit 14 and controller 32 was not stated, nor could it be derived.

Since the oscillator circuit of the displacement detection unit 14 was located on one of the elements of the damper 12 and the displacement detection unit 14 and the controller 32 were always disclosed together (see paragraphs [0026] and [0027] of E1), the controller 32 was at least indirectly also located on the same element of the damper 12.

In similar fashion, E2 did not exclude the possibility of the microcomputer 23 being located directly on support 12. Figure 3 showed only a schematic electrical circuit diagram and Figures 1 and 6 of E3 displayed the weight detection mechanisms 8 directly on the core shaft 10. In addition, the oscillator circuit 21 and the micro computer 23 were always described in the same context (see paragraph [0017] of E2).

Similar arguments to those made in respect of E2 were valid for E3, E4, E5, E6, E7 and E10, i.e. none of these documents excluded the possibility of the corresponding processing means being located directly on one of the telescopic elements and the corresponding oscillator circuit and processing means were always described in the same context in each of these documents.

*Auxiliary request 1 - inventive step*

*Starting from E1*

Should E1 not be understood to disclose the location of the oscillator circuit and of the processing means on the telescopic member, the objective problem was to reduce the length of the connections between coil, oscillator and processing means.

E4 disclosed the solution, i.e. an oscillator and a processing means in one of the telescopically coupled elements. This was also common general knowledge.

The skilled person would therefore combine the teaching of E4 or common general knowledge with E1 and arrive at the subject-matter of claim 1 without requiring any inventive activity.



*Starting from E8*

Claim 1 differed from E1 and E8 by the same features such that the objective problem to be solved would be the same.

E4 disclosed the solution, i.e. an oscillator and a processing means in one of the telescopically coupled elements and this was also common general knowledge.

The skilled person would therefore combine the teaching of E4 or common general knowledge with E8 and arrive at the subject-matter of claim 1 without involving an inventive step.

Since E12 disclosed that the coil 2, the oscillator 5 and the microcontroller 7 were operationally connected, it was at least obvious for the skilled person considering the teaching of E12 to place the oscillator and the microcontroller directly on one of the telescopic elements. The skilled person would therefore also combine the teaching of E12 with E8 and arrive at the subject-matter of claim 1 without inventive skill being required.

*Starting from E11*

E11 differed from claim 1 in that:

- the electronic module did not comprise an oscillator circuit
- the weight of the load was not measured before the treatment
- the oscillator circuit and the processing means were not located on the telescopic member.

The objective problem was to establish an accurate and stable way of measuring the mass or weight of the soft goods.

It would be obvious for the skilled person to adapt the appliance of E11 using common general knowledge and thus arrive at the subject-matter of claim 1.

VIII. The respondent's arguments may be summarised as follows:

*Main request - admittance*

The main request should be admitted into the proceedings.

The main request was filed in reaction to the Board's negative opinion on the novelty of claim 11, which was based on the Board's view that the electronic detection module mentioned in claim 11, which was adapted to detect the relative displacement and was located on one of said two elements, was disclosed in E4.

In addition, the amendments to claim 11, which brought it into line with claim 1, did not introduce new elements which had hitherto not been discussed between the parties.

The expression "a treatment" defined twice in the claim was unclear but it was simply an obvious error that could be corrected.

Claim 1 did not *prima facie* give rise to objections under Article 123(2) EPC, the paragraphs [0019], [0022], [0023], [0030], [0034], [0041], [0045] and [0048] provided a basis for the amendments in claim 1.

*Auxiliary request 1 - novelty*

The subject-matter of claim 1 of auxiliary request 1 was novel.

None of E1, E2, E3, E4, E5, E6, E7 or E10 directly and unambiguously disclosed a processing means located on one of the telescopically coupled elements.

*Auxiliary request 1 - inventive step*

The subject-matter of claim 1 involved an inventive step.

*Starting from E1*

The subject-matter of claim 1 differed from E1 in the oscillator circuit and in the processing means being both located on the telescopic member. These features provided a reduction of the electromagnetic noise as also stated in paragraph [0064] of the patent. The objective technical problem was thus to reduce the electromagnetic noise in order to obtain a more reliable value of the mass or weight of the soft goods.

The solution was not common general knowledge. The error in the upstream measurement and determination of the oscillation frequency caused by electromagnetic noise between the oscillator circuit and the processing means lead to a bigger deviation in the determined mass or weight of the soft goods value than the noise error induced downstream by the transmission of this single value as output from the processing means.

E4 did not disclose the solution to the problem, since E4 did not unambiguously disclose the position of the microcomputer 33.

*Starting from E8*

E8 did not disclose an oscillator circuit nor a processing means located on one of the telescopic elements.

The objective problem to be solved was therefore to increase accuracy and reduce the effect of electromagnetic noise.

Neither E4 nor E12 unambiguously disclosed the position of the microcomputer 33. Thus, the skilled person would not arrive at the subject-matter of claim 1 by combining the teaching of either of them with E8.

*Starting from E11*

E11 addressed a different problem than the patent. E11 differed from claim 1 in that:

- the electronic module did not comprise an oscillator circuit
- the weight of the load was not measured before the treatment
- the oscillator circuit and the processing means were not located on the telescopic member.

The skilled person relying on would not have any hint how to arrive at the subject-matter of claim 1, which was not obvious and provided a new solution to the problem of reducing the effect of electromagnetic noise.

## Reasons for the Decision

### 1. Main request - Admittance

- 1.1 The main request was filed with letter dated 20 March 2020 in an amendment to the party's appeal case.
- 1.2 Article 13(1) RPBA 2020 stipulates that any amendment to a party's appeal case may be admitted only at the Board's discretion. This discretion is to be exercised in view of, *inter alia*, the current state of the proceedings, whether the amendment is detrimental to procedural economy, the suitability of the amendment to resolve the issues which were admissibly raised and whether the party has demonstrated that any such amendment, *prima facie*, overcomes the issues raised by another party in the appeal proceedings or by the Board and does not give rise to new objections.
- 1.3 The respondent argued that the main request was filed in reaction to the Board's unexpected and negative opinion on the novelty of claim 11, which was based on the Board's view that E4 disclosed an electronic detection module that was adapted to detect the relative displacement and was "located on one of said two elements", as defined in claim 11.

The Board does not find this persuasive. These objections were already put forward by the appellant in its grounds of appeal (see page 7, item f, page 60, item k and page 67, item d to page 68, item h).

A preliminary negative opinion from the Board based on arguments already known to the parties does not constitute an unexpected event that would legitimately trigger a response from the affected party.

Further, in as far as procedural economy is concerned, while an amendment at a late stage in the proceedings might be justifiable (for example) if it were an appropriate and immediate reaction to unforeseeable developments in the proceedings which do not lie in the responsibility of the party submitting the amendment, this is not the case here, as the arguments were known to the respondent and the preliminary opinion of the Board merely gave the Board's view on the objections made. Additionally, there had been ample opportunity (which the respondent also used) to file auxiliary requests to overcome the objections regarding novelty of claim 11. Although sufficient justification not to admit the request can be gleaned from the foregoing, it is useful to note that several further reasons also stand against the Board exercising its discretion to admit the request, as explained below.

- 1.4 In regard to both Article 123(2) EPC and the issue of complexity of the resultant subject-matter, the respondent argued that the amendments made to claim 11 merely brought it into line with claim 1 such that it was not only clearly disclosed but also did not introduce new elements which had hitherto not been discussed between the parties.

The Board does not concur. Whilst the originally filed application might indeed have provided a basis for a household appliance for treating soft goods with the specific features of claim 1, this does not mean that the application as filed automatically includes the

features of claim 1 for use in a method such that new "elements" for discussion (as the respondent called them) arise. As explained below, a general disclosure of such a method feature as now included cannot be found.

- 1.5 The respondent argued that paragraphs [0019], [0022], [0023], [0030], [0034], [0041], [0045] and [0048] applied to the invention in general and the skilled person directly and unambiguously derived from them that the relative displacement was associated with the mass or weight of soft goods loaded into the swinging assembly of the washing machine before said soft goods were subjected to a treatment by the washing machine.

Again, the Board does not concur. Paragraphs [0019], [0022] and [0023] explain the principles for measuring the relative displacement between the two telescopically coupled elements using an oscillator but these do not form a disclosure of a method that determines a piece of information as defined in claim 11. For example, these passages do not disclose that the measurement of mass or weight of the soft goods may occur before the soft goods are subjected to a treatment.

Paragraphs [0030] and [0034], on the other hand, relate to a specific embodiment of the household appliance in Figures 1 and 2b, where the two elements of the swinging system are the piston 4 and the cylinder 3 (which were however omitted from claim 11 when making the amendment in the main request).

The same reasoning applies to paragraphs [0045] and [0048], which, irrespective of whether they form a different disclosure applying to all embodiments or

not, also deal with the relative displacement between a piston made of ferromagnetic material in the inner volume of a coil 9 on a cylinder. Paragraph [0045] of the application as filed also discloses a more specific connection between the oscillator circuit and the processing means comprising a digital counter CNT that measures the number of oscillations per second of the signal.

Paragraph [0041] is only an explanation of the advantage of connecting the electronic detection module with a central controller directly and in digital format instead of analog. The claim does not define a connection to a central controller, either digitally or in an analog manner, such that the skilled person would not directly and unambiguously derive from these described advantages any general disclosure that could relate to the method of claim 11.

The amendment therefore, at least *prima facie*, gives rise to new objections under Article 123(2) EPC.

- 1.6 The use of the indefinite article in the amended expression "a treatment by the washing machine" at the end of the characterizing portion of claim 11 leaves it unclear whether this expression is referring to the treatment defined in the preamble of the claim or to another treatment. The amended expression therefore at least *prima facie* also gives rise to a new objection under Article 84 EPC.

Whilst the clarity objection was immediately acknowledged by the respondent in the oral proceedings, its presence however highlights a still further issue of Article 13(1) RPBA 2020 which was not addressed. In particular, the respondent had failed to "demonstrate"



why the amendment "did not give rise to further objections", in particular the requirement of clarity.

1.7 In view of the above, the Board exercised its discretion under Article 13(1) RPBA 2020 not to admit the main request into the proceedings.

2. Auxiliary request 1 - novelty

*Interpretation of the claim*

2.1 The Board finds that a module does not need to be a self-contained component as already indicated in the Board's provisional opinion (see item 1.1 of the communication dated 12 March 2020). For the purposes of claim interpretation in the present case, a "module" is instead understood to refer more to the capacity of carrying out a function and being an interchangeable part of a more complex construction, (i.e. to be used as a "Baustein" as argued by the appellant with reference to E14) than to the impossibility of the module itself being divided or occupying a confined space. The Board also notes that paragraph [0063] of the patent itself states that the microcontroller 16, which is part of the electronic detection module, "may be positioned without distinction either on the same PCB board housing the oscillator circuit or at a distance from said circuit". A module in the context of the patent can thus generally be made of different physical components in different places.

2.2 However, claim 1 of the first auxiliary request defines that the module (regardless of how the components of the module are arranged) is located on one of the telescopically coupled elements.

2.3 The appellant argued that the claim wording left open the possibility for the module to be only partially located on one of said elements. However, the skilled person reading the expression "module located on... element" understands that all the components building the module (e.g. the oscillator circuit and the processing means) need to be located on the element regardless of how they are connected and arranged. If not all parts of the module are located on one member, this would not be the "module" that is located on the element as required by claim 1 but only part of the module.

*E1*

2.4 E1 discloses (references below in parentheses being taken from E1) a household appliance for treating soft goods, in particular a laundry washing machine (see paragraph [0025] and corresponding Figure 1) comprising a swinging assembly (tub 3, drum 4) elastically constrained to a frame (housing 1) by means of a suspension system (springs 10,11 and dampers 12,13) comprising a pair of elements (see Figure 2 and paragraph [0026], the movable and immovable portions 20 and 21 of the dampers 12,13) telescopically coupled to each other through two respective ends, wherein a first (movable portion 21) of said two ends comprises ferromagnetic material (ferrite core 25) and a second (immovable portion 20) of said two ends comprises a coil (coil 23), and an electronic detection module (displacement detection unit 14 and controller 32) adapted to detect a relative displacement of said two ends, wherein

said electronic module (displacement detection unit 14 and controller 32) comprises an

oscillator circuit (Colpitts type oscillator circuit comprising coil 23, inverter 27, resistance 28 and capacitors 29 and 30), the oscillation frequency of which depends on the impedance of said coil (coil 23), and

processing means (controller 32) operationally connected to said oscillator (see paragraph [0026], the controller "controls the operation in accordance with a signal from the displacement detection unit 14" which comprises the Colpitts oscillator) and adapted to measure said oscillation frequency, and to determine, as a function of said oscillation frequency, at least one piece of information which can be associated with said relative displacement (paragraph [0027], "the controller 32 can detect the amount of clothes during washing... in accordance with the displacement of extension or contraction of the damper 12 thus detected"),

said information being the measurement of the mass or weight of the soft goods loaded in said swinging assembly before said soft goods are subjected to a treatment, in particular a wash treatment (see paragraph [0027], "detecting the amount of clothes during washing" amounts to detecting the amount of clothes before the dehydration cycle).

- 2.5 The appellant argued that Figure 2 of E1 only displayed an electrical circuit and not the physical arrangement of the various electrical components such that a separation between the displacement detection unit 14 and controller 32 could not be derived. According to the appellant, since the oscillator circuit of the

displacement detection unit 14 was located on one of the elements of the damper 12 and the displacement detection unit 14 and the controller 32 were always disclosed together in the same parts of the description(see paragraphs [0026] and [0027] of E1), the controller 32 was at least indirectly also located on the same element of the damper 12.

- 2.5.1 The Board does not find this argument convincing. Whilst the Board agrees that Figure 2 of E1 does not unambiguously disclose whether the displacement detection unit 14 and controller 32 form a single piece or not, it also does not allow a skilled person to directly and unambiguously derive the location of the displacement detection unit 14 or the controller 32, i.e. whether they are located on an element of the damper 12 or not. The coil 23 is the only element which is unambiguously disclosed as being located on the immovable portion as shown in Figure 2 and described in paragraph [0026].

As explained above under item 2.3, since the locations of the oscillator and the controller 32 are not unambiguously disclosed and both are components of the electronic detection module, E1 does not disclose an electronic module located on one of the two elements of a suspension system as defined in claim 1.

E2

- 2.6 The appellant argued in a similar fashion to the arguments made regarding E1, that E2 did not exclude the possibility of the microcomputer 23 being located directly on support 12. Figure 3 showed only a schematic electrical circuit diagram and Figures 1 and 6 of E3 displayed the weight detection mechanisms 8

directly on the core shaft 10. In addition, the oscillator circuit 21 and the micro computer 23 were always described in the same context (see paragraph [0017] of E2).

- 2.7 The Board does not agree. Figure 3 of E2 discloses a schematic diagram of an electrical circuit, from which the physical arrangement of the individual components on the disclosed washing machine cannot be derived. Paragraph [0017] discloses that the coil 17 and the capacitors 19 and 20 form an oscillator circuit 21 that sends pulse signals to a micro computer 23 (which can be understood as corresponding to the claimed processing means). However, contrary to the argument of the appellant, it does not disclose anything about the specific location of the components in the washing machine. Also, Figure 6 shows that the coil 17 is located on the upper spherical support 12, but it is not possible for the skilled person to directly and unambiguously determine where the other components of the electronic module (the capacitors 19 and 20 as well as the micro computer 23) are located.

*E3, E4, E5, E6, E7 and E10*

- 2.8 The appellant argued in the same way for E3, E4, E5, E6, E7 and E10. However, the Board finds that none of them discloses more than E2 such that the same reasoning applies to E3, E4, E5, E6, E7 and E10. All these documents disclose a diagram of an electrical circuit where a pulse signal is sent to a micro computer/controller and a drawing of a telescopic system depicting the position of a coil located on a telescopic element, but where the positions of the other elements including the oscillator and micro computer are not directly and unambiguously disclosed.

- 2.9 None of the cited passages in any of the documents gives further information about the specific physical location of the controller/micro computer to the skilled person, since they only disclose the transmission of a signal between an oscillator circuit and a controller/micro computer where the signal is then processed (see e.g. paragraph 14 of E3, paragraph 18 of E5, paragraphs 11 and 12 of E6, paragraphs 15 and 16 of E7 and paragraph 30 of E10).
- 2.10 The same holds true for E4. The calculation in E4 is done on a microcomputer 33 which receives pulse signals as described in paragraph [0018] but the location of the microcomputer is not disclosed explicitly. Since Figure 6 discloses a cable connected to the detection means 25 and Figure 7 shows an output of a pulse signal from the detection means 25, it also is not implicit either that the microcomputer 33 is located on one of the telescopic elements as defined in claim 1. The weight sensor 30 and the detections means 25 are the only components disclosed as being located on the suspension rod and, according to paragraphs [0016] to [0018] and Figure 7 of E4, they are only constituted by the core 23, the coil 24 and oscillator circuit 28.
- 2.11 Therefore, none of E1 to E7 and E10 discloses a processing means located on one of the elements as defined in claim 1. The subject-matter of claim 1 is consequently novel (Article 54 EPC).
3. Auxiliary request 1 - inventive step

*E1 as a starting point*

- 3.1 As discussed above (see items 2.4 and 2.5), the subject-matter of claim 1 differs from E1 in the location of the oscillator circuit and of the processing means on the telescopic member.
- 3.2 It is not disputed that these features provide a reduction of the electromagnetic noise as paragraph [0064] of the patent also states. The objective technical problem is thus to reduce the effect of electromagnetic noise in order to obtain a more reliable value of the mass or weight of the soft goods.
- 3.3 The processing means defined in claim 1 measures the oscillation frequency (from an input wave signal) and then determines the mass or weight of the soft goods, which is a single value (piece of information). The processing means will also necessarily output the mass or weight of the soft goods to a further point away from the telescopic element such that electromagnetic noise will also cause an error in the signal transmitted downstream of the oscillator circuit.
- 3.4 Following the argument of the respondent, the Board finds that the errors in the upstream measurement and determination of the oscillation frequency, caused by electromagnetic noise between the oscillator circuit and the processing means, would be expected to result in a bigger deviation in the (finally) determined mass or weight of the soft goods value (i.e. a single value) than the noise error from the same electromagnetic source induced downstream by the transmission of the output of the single value from the processing means.
- 3.5 Contrary to the argument of the appellant, E4 does not disclose the solution to the problem. As discussed above under item 2.10, E4 does not disclose the

position of the microcomputer 33 (i.e. that part which corresponds to the processor of claim 1). It could be for example where it is typically located, close to the machine control panel.

- 3.6 The appellant also argued that it was common general knowledge that long connections lead to increased noise and that the distances between electrical and electronic components should be as short as possible, such that the skilled person would be led to the solution in claim 1.

The Board does not find this argument convincing. Whilst it could be argued that locating the whole oscillator circuit together with the coil or the ferromagnetic material on one of the telescopic elements would be obvious, the Board notes that the position of the microcontroller is also not disclosed in E1. Further, even if it were common general knowledge that the distances between electrical components should always be kept as short as possible, this would *per se* not provide an incentive for the skilled person to change the position of the processing means in this case, since the processing means is connected upstream to the oscillator circuit while downstream, as explained above, it is also necessarily connected to some other component such that simply changing the position of the processing means in the circuit would normally be a zero sum game (in terms of connection lengths and the effects of electromagnetic noise on these lengths) that would not provide any incentive to use shorter connection lines in any particular part of the entire circuit. The skilled person would therefore have no reason to select the location of the processing means of E1 (the controller 32) to be placed together with the oscillator circuit



on one of the elements of the swinging assembly when faced with the problem of reducing the effect of noise (which is accepted to be the result - see 3.4 above) unless an inventive step were involved.

- 3.7 For the above reasons, the subject-matter of claim 1 of auxiliary request 1 is not obvious when starting from E1 as the closest prior art and, given the technical problem to be solved, when considering the teaching of E4 and/or common general knowledge.

*E8 as a starting point*

- 3.8 It has not been disputed by the parties that E8, which has been used as a closest prior art starting point by the appellant, discloses all the features of the preamble of claim 1. In addition, both parties agree that E8 does not disclose an oscillator circuit at all (as disclosed in column 3, lines 50 to 52, it uses a quarter bridge, which corresponds to an electronic module adapted to detect a relative displacement between the two ends of the piston-cylinder arrangement of E8) nor a processing means located on one of the telescopic elements. The Board sees no reason to conclude otherwise.

Further, E8 (see column 4, lines 4-27) discloses the measurement of the mass or weight of the soft goods loaded in said swinging assembly before said soft goods are subjected to a treatment.

- 3.9 The exchange of the quarter bridge by an oscillator circuit would provide a more accurate way of establishing the relative displacement than a voltage measurement provided by a Wheatstone quarter bridge. On the other hand, locating the processing means on one of

the telescopic elements reduces the effect of electromagnetic noise as already discussed above (see item 3.2). The objective problem to be solved can therefore be seen to reduce the effect of electromagnetic noise and to obtain a more accurate value of the mass or weight of the soft goods.

- 3.10 The appellant argued that since E12 disclosed the coil 2, the oscillator 5 and the microcontroller 7 being operationally connected, it was at least obvious for the skilled person considering the teaching of E12 to place the oscillator and the microcontroller directly on one of the telescopic elements.

The Board does not agree. E12 discloses (see Figure 1 and paragraphs [0022] and [0023]) an oscillator circuit 5 and a microcontroller 7 adapted to establish the position of the core 3, but it is not unambiguous from E12 where the oscillator 5 and the microcontroller 7 are located. Therefore, even if E12 teaches that the displacement can be measured by an oscillator circuit, it does not provide any teaching regarding the location of any of the components of the electronic module. The teaching of E12 therefore does not lead the skilled person to the subject-matter of claim 1 without the exercise of an inventive step.

- 3.11 The same applies to the teaching of E4 and common general knowledge, as already discussed above under items 2.8 and 2.10 as well as 3.3 to 3.6. The Board does not find that it would be obvious for the skilled person to place at least the microcontroller on one of the telescopic elements when starting from E8 and trying to reduce the effects of electromagnetic noise, given the technical teaching of E4, E12 and/or common technical knowledge.

3.12 The Board finds that the subject-matter of claim 1 of auxiliary request 1 involves an inventive step when starting from E8 as the closest prior art and, given the technical problem to be solved, when considering the teaching of E4, E12 and/or common general knowledge.

*E11 as a starting point*

3.13 It is not contested between the parties that E11 differs from claim 1 only in that:

- the electronic module does not comprise an oscillator circuit
- the weight of the load is not measured before the treatment
- the oscillator circuit and the processing means (of claim 1) are not located on the telescopic member.

3.14 In E11 an unbalance is determined as a piece of information. Contrary to the argument of the appellant, the objective problem cannot be to establish an accurate and stable way of measuring the mass or weight of the soft goods and is instead simply to provide an accurate and stable method of determining an alternative piece of information associated with the displacement.

3.15 The appellant further argues that the skilled person would adapt the appliance of E11 and arrive at the subject-matter of claim 1 without involving an inventive step, but the Board does not find this argument convincing.

Even if the skilled person would consider determining the mass or weight as an obvious alternative to the

determination of unbalance, E11 does not provide any specific location or hint to guide the skilled person looking to establish a location for the oscillator and the processing means. Therefore, just as explained above when starting from E1 (see items 3.3 to 3.6), the skilled person trying to improve stability for the method (by reducing the noise) would not place the processing means together with the oscillator circuit on one of the elements of the swinging assembly in an obvious way, since this does not lead to shorter connection lengths (as argued by the appellant).

- 3.16 The Board thus finds that the subject-matter of claim 1 of auxiliary request 1 involves an inventive step when starting from E11 as the closest prior art and, given the technical problem to be solved, when considering common general knowledge.
  
4. In the absence of further attacks against the presence of an inventive step, the Board finds that the subject-matter of claim 1 of auxiliary request 1 involves an inventive step when considering the cited prior art and the arguments forwarded by the appellant in this regard. The requirement of Article 56 EPC is therefore fulfilled. Auxiliary request 1 is thus allowable.
  
5. Regarding adaptation of the description to the new claims, the Board considers that the required amendments to the description are not of inconsiderable scope, e.g. a description of the disclosure in E1 should be added to the description. Under these circumstances, the Board thus decided to remit the case to the opposition division under Article 111(1) EPC for the description to be adapted to the claims found allowable. In regard to Article 11 RPBA 2020, it is noted that remittal of a case for adaptation of the

description is not a remittal for "further prosecution" in the classic sense (this also being clear from e.g. CA/3/19, page 30, explanatory remarks to Article 11 RPBA 2020, second paragraph), such that no "special reasons" need to be present.

## 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 with the following claims and a description to be adapted:

Claims No. 1 to 10 of the first auxiliary request filed with letter of 20 March 2020.

The Registrar:

The Chairman:



D. Grundner

M. Harrison

Decision electronically authenticated