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**Datasheet for the decision
of 21 November 2017**

Case Number: T 2566/12 - 3.2.06

Application Number: 04425550.3

Publication Number: 1619285

IPC: D06F37/02, D06F37/04

Language of the proceedings: EN

Title of invention:

Basket for washing machine, washer-drier, drier, and the like

Patent Proprietor:

Candy S.p.A.

Opponent:

Whirlpool EMEA S.p.A.

Headword:

Relevant legal provisions:

EPC Art. 56, 84

RPBA Art. 13(1)

Keyword:

Inventive step - (yes)

Claims - clarity in opposition appeal proceedings

Late-filed document - admitted (no)

Decisions cited:

G 0003/14

Catchword:



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Case Number: T 2566/12 - 3.2.06

D E C I S I O N
of Technical Board of Appeal 3.2.06
of 21 November 2017

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Decision under appeal: **Interlocutory decision of the Opposition
Division of the European Patent Office posted on
25 October 2012 concerning maintenance of the
European Patent No. 1619285 in amended form.**

Composition of the Board:

Chairman M. Harrison
Members: T. Rosenblatt
J. Hoppe

Summary of Facts and Submissions

- I. The appellant (opponent) filed an appeal against the interlocutory decision of the opposition division, posted 25 October 2012, in which the opposition division found that European patent No. 1 619 285 in an amended form met the requirements of the EPC.
- II. Amended claim 1 considered allowable by the opposition division has the following wording:

"Basket (6) for loading the laundry in a washing machine, drying machine and the like, comprising an innerly hollow body with a longitudinal axis (X) being the basket (6) rotation axis, wherein said body has a rear wall (8) to be fixed to a support structure (4) of basket (6) and a front wall (9) opposite to the rear wall (8), both rear and front walls being transversal to the longitudinal axis (X), as well as a side wall (7) extending about the longitudinal axis (X) and is connected to said rear and front walls to form said hollow body, wherein the side wall (7) comprises at least one shaped length (12) the radial distance thereof (r , r_{14} , r_{15}) from the longitudinal axis (X) being increased towards the rear wall (8) such that the barycenter of the inner volume (10) defined by the hollow body is displaced towards the rear wall (8), **characterized in that** in the shaped length (12) there are formed one or more steps (13) extending along a circumferential direction to the longitudinal axis (X), each providing an increase in the radial distance (r , r_{15} , r_{14}) of the shaped length from the longitudinal axis (X) and wherein said one or more steps define at least two portions (14, 15) of the side wall (7) having a different radial distance (r , r_{14} , r_{15}) from the longitudinal axis (X), wherein said side wall (7)

comprises a cylindrical rear length (19) connected to the rear wall (8) and a cylindrical front length (18) connected to the front wall (9), wherein said rear and front lengths have the same diameter ($r_{18} = r_{19}$)."

For convenience, the following features of claim 1, which were of particular importance in the examination of the appeal, will be referred to in an abbreviated manner by the following alphanumerical designations indicated in bold:

d) wherein the side wall (7) comprises at least one shaped length (12) the radial distance thereof (r , r_{14} , r_{15}) from the longitudinal axis (X) being increased towards the rear wall (8)

d1) such that the barycenter of the inner volume (10) defined by the hollow body is displaced towards the rear wall (8),

h1) wherein said side wall (7) comprises a cylindrical rear length (19) connected to the rear wall (8)

h2) and a cylindrical front length (18) connected to the front wall (9),

h3) wherein said rear and front lengths have the same diameter ($r_{18} = r_{19}$).

III. The appellant argued that the subject-matter of claim 1 lacked an inventive step, based on the following evidence :

E5 : EP-A-0 421 442,

E7 : US-A-5 709 109,

E11 : DE-A-39 35 382,

E12 : EP-A-1 408 149,

E13 : US-A-3 595 036,

E19 : EP-A-0 390 343.

E19 was filed for the first time with the appellant's letter dated 20 October 2017.

- IV. Oral proceedings before the Board of Appeal were held on 21 November 2017, in the course of which the respondent submitted a document consisting of four pages of photographs, referred to in the following as E20. Further, the appellant raised novelty objections during the oral proceedings for the first time in the appeal proceedings, these objections being withdrawn after a discussion of their relevance.
- V. The appellant requested that the decision under appeal be set aside and the patent be revoked, auxiliarily that the case be remitted to the opposition division if auxiliary requests I-IV were admitted into the proceedings.
- VI. The respondent (patent proprietor) requested dismissal of the appeal, auxiliarily that the patent be maintained on the basis of one of the auxiliary requests I to IV, filed with letter dated 18 October 2017 auxiliarily, if these auxiliary requests were considered as submitted too late, maintenance of the patent on the basis of one of auxiliary requests I to III filed with letter dated 27 June 2013.
- VII. The arguments of the appellant can be summarised as follows:

Amended claim 1 lacked clarity since, due to the amendment, the closest prior art had changed, resulting as a consequence in feature d1) constituting the only distinguishing feature. This feature defined only a

result to be achieved which was not allowable in the present case.

The subject-matter of claim 1 was distinguished over the prior art basket known from E7 by features h2) and h3). These features did not solve any technical problem and could therefore not contribute to an inventive step (see also decision T 72/95). Only from common general knowledge would the skilled person have recognised that an annular flange on the front side extending radially outwardly to a diameter corresponding to the diameter at the side wall's rear end provided further advantages in the construction of the basket and its fluid balancer. Moreover, identical cylindrical diameter end sections of washing machine baskets belonged to common general knowledge, such as documented by E11, E12 and E13, and constituted a natural starting point for a basket's design.

In regard to the basket known from E5, the subject-matter of claim 1 was distinguished therefrom only by feature h3). Feature h2) was disclosed in E5 in the passage in column 11, lines 36 to 40, relating to an alternative stepped configuration of the basket's side wall. The missing feature h3) was obvious for the skilled person in view of common general knowledge, for similar reasons as set out in regard to E7 as the closest prior art. Furthermore, considering that E7 disclosed a front end diameter smaller than the rear end diameter ($d_f < d_r$) and considering that E5 disclosed the opposite relation of diameter ($d_f > d_r$), it could not be considered to involve any inventive activity to select an equal diameter relationship. Also E12 rendered the subject-matter of claim 1 obvious because the skilled person would have appreciated the simplification of the manufacturing obtained by the

process of E12, in particular for obtaining a side wall being stepped so as to provide a barycenter shift to the rear.

Also the combination of the two embodiments of baskets shown in Figures 1 and 3 of document E11 would have lead the skilled person without the exercise of inventive skill to the subject-matter of claim 1. Starting from the embodiment shown in Figure 3, the skilled person would have noticed that the embodiment of Figure 1 provided a solution to the problem of an oscillating rotation of the basket due to its tapered shape. Taking into account the further problems associated with the basket of Figure 3, linked *inter alia* to the arrangement of the drain tube, the skilled person would have prolonged the center section of increased diameter toward the rear end and, in order to facilitate water back flow at the rear wall, would have introduced a reduced diameter cylindrical section. Moreover, claim 1 lacked an inventive step in view of the combination of E11 with E5 or E7.

E12 disclosed a method of manufacturing a cylindrical basket by deep drawing. The basket comprised a side wall with steps which resulted in a diameter increase towards the rear end and a corresponding barycenter shift. If d1 were considered to not to be known from E12, this feature would have been obvious in view of either common general knowledge or in view of E5 or E7 which disclosed tapered baskets for reducing vibrations occurring during the basket's rotation upon unbalanced laundry distribution in the basket's inner volume.

Similarly, the subject-matter of claim 1 lacked an inventive step when starting from E13 as the closest prior art.

E19 should be admitted into the proceedings because it was *prima facie* relevant since it prejudiced the maintenance of the granted patent for lack of inventive step. The embodiment of a basket shown in Figure 2 lacked only feature h3) which was however rendered obvious by the embodiment disclosed in Figure 28.

VIII. The arguments of the respondent can be summarised as follows:

Claim 1 was based on granted claim 14. Clarity was not a ground of opposition and the objection should also be rejected as inadmissible under Article 12(4) RPBA, since no such objection had been raised before the opposition division.

Starting from E7 as the closest prior art, the distinguishing features h1), h2), h3) allowed for a standardisation of the manufacture of washing machine baskets, leading to a reduction of stock in parts and consequently of costs. Also, the cylindrical equal diameter ends on both sides simplified the manufacture as a single rotary edge folding tool could be used when fixing the respective end wall to the side wall, as shown by the photographs in E20. Finally, the cylindrical end length improved the detachment of laundry close to the side wall.

Providing two cylindrical end sections of equal diameter on the basket known from E7 would have required a modification of the entire basket's structure, for which there was no motivation. An annular front extension as argued by the appellant was nowhere suggested and would furthermore prevent the fluid balancer from being mounted on the basket's side

wall. Otherwise it would require a complete re-design of the specific balancer disclosed in E7. The manufacturing method of E12 related to a different problem, was silent about basket oscillations and did not disclose a basket with a barycenter shift of its inner volume towards the rear wall. The particular edge geometry was not disclosed, the equal diameter relation being just an inherent feature of a cylindrical basket which did not allow any conclusion to be drawn on how to form the edges in a tapered basket. E13, which disclosed a cylindrical basket for a slowly rotating drying machine, also did not point the skilled person to the missing features.

E5 disclosed a molded resin basket, which lacked features h1), h2), and h3). Again, providing these features on the basket of E5 would have required a complete and counter-intuitive re-design of the resin basket, in particular in regard to the connection of the rear wall to the side wall by means of the interposed fluid balancer ring which was inserted into the rear end of the basket's side wall. Turning to E12, the manufacturing method disclosed therein could not have simplified the manufacture of a basket according to E5. For example, the features on the basket's side wall providing for a sliding door arrangement could not be obtained by the deep drawing process of E12.

Concerning the basket known from E13, the skilled person would not have contemplated providing it with a tapered surface. On the one hand, the basket was for use in a drying machine which rotated slowly. Problems of oscillations during high speed spinning due to unevenly distributed laundry would not occur. Moreover, E13 set out that an even liquid level of 1 inch had to be maintained during dry-rinsing operations. A tapered

side wall would clearly not allow this requirement to be met. Moreover, the basket was supported on the side opposite its shaft by idler rolls, which rendered any consideration on unbalanced laundry weight distribution meaningless.

E11 disclosed two baskets which provided means for collecting washing liquor with a drain tube in a specifically shaped portion of the basket's side wall. Neither of the two embodiments of Figure 1 and 3 disclosed cylindrical end length, so that a combination of these embodiments could not lead to the subject-matter of claim 1.

E19 should not be admitted into the proceedings since it was submitted too late and did not appear more relevant than the other prior art on file. The embodiment of Figure 2 did not disclose cylindrical end lengths. Figure 28 did not disclose any details with respect to the symmetry of the rubber band 171; nothing could be deduced in regard to a potential shift of its inner volume barycenter.

Reasons for the Decision

Article 84 EPC

1. In its appeal grounds, the appellant raised an objection against the subject-matter of claim 1 underlying the impugned decision in regard to the requirement of clarity.

Claim 1 is based on a combination of granted claims 1 and 14.

2. In its communication sent in preparation for the oral proceedings the Board referred to the decision G 3/14 taken in the meantime by the Enlarged Board of Appeal (OJ EPO 2015, A102) and stated that the appellant's clarity objection against amended claim 1, being seemingly a combination of the above mentioned granted claims, could accordingly not be considered.
3. The appellant did not present any further argument in this regard, so that the Board has no reason to deviate from its preliminary opinion, which is hereby confirmed.

Article 56 EPC

4. E7 as closest prior art
 - 4.1 E7 discloses a conically shaped basket (100) for a drum-type washing machine, comprising a side wall which increases in diameter from front to rear, as well as front and rear walls connected to the side wall. The conical side wall also comprises, close to the basket's rear end, a sudden increase in taper angle, corresponding to a stepped diameter increase according to amended claim 1 of the patent in suit. Following this stepped diameter increase, a cylindrical end length extends in the rearward direction and connects to the rear wall. The front wall is connected to the tapered side wall.

The basket further comprises an annular fluid balancer (102) having a generally right-triangular cross-section mounted on the tapered diameter section of the side wall, its outer cylindrical circumference extending flush with the side wall's cylindrical rear end length.

- 4.2 Having regard to the features of claim 1 only features h2) and h3) are not disclosed in E7, which is undisputed between the parties.
- 4.3 The objective technical problem based on features h2) and h3) has to be determined.
- 4.3.1 The patent undisputedly does not disclose any particular effect in relation to these features.
- 4.3.2 The Board cannot see that the technical effect considered by the opposition division in the impugned decision (standardisation of components leading to reduced stock and reduced manufacturing costs), nor the effects mentioned in the respondent's letter sent in reply to the Board's preliminary written opinion or those formulated during the oral proceedings (simplification of manufacture or improved detachment of laundry from the sidewall) are necessarily achieved by these features. Since the Board decided in favour of the respondent (see below 4.3.4), a detailed reasoning in this respect can be dispensed with. Similarly, the reason for the Board's decision not to admit E20 submitted by the respondent during the oral proceedings in this context may also be dispensed with.
- 4.3.3 On the other hand, the Board also does not agree with the appellant's contention according to which the distinguishing features, in particular feature h3), would be devoid of any technical effect at all and could therefore not contribute to an inventive step. As stated before, the subject-matter of claim 1 is distinguished by two features h2) and h3), rather than only the latter. These features provide at least the technical effect of a mechanical connection between the front and side walls and can therefore not be

considered to be void of any technical meaning at all. For this reason the case law of the Boards of Appeal to which the appellant referred in this context, in particular T 72/95, does not apply to the present case.

4.3.4 The Board considers that an objective technical problem can be seen as being the provision of an alternative form of connection of the front and rear walls to the side wall.

4.4 The arguments of the appellant do not convince the Board that the skilled person, starting from the basket disclosed in E7 and faced with this objective technical problem would arrive in an obvious manner at the subject-matter of claim 1.

4.4.1 With respect to the appellant's argument that the skilled person would have provided, at the small diameter front end of the tapered basket, a kind of annular hollow flange, presenting at its radially outward end a cylindrical front length being aligned with the cylindrical rear length of the basket's side wall, the Board finds such consideration counter-intuitive and incompatible with the assembly of the fluid balancer and the basket of E7. A flange-like front end structure would not allow the mounting of the fluid balancer on the tapered side wall without requiring at least the balancer's complete re-design, as pointed out by the respondent. Although a flange-like front end might provide further advantages in view of securing the balancer on the side wall or in view of a better distribution of weight along the basket's longitudinal axis, such considerations relate to other technical problems than the objective technical problem being considered here and therefore cannot guide the skilled person to the claimed subject-matter.

4.4.2 The appellant's contention that equal diameter cylindrical end portions belong to common general knowledge of the skilled person, as exemplified by E12 or E13, and would therefore have been considered as a first or natural choice (since the design of a basket would naturally start from such general cylindrical shape) does not alter the Board's finding. Although such equal diameter end portions might be a commonly known shape in cylindrical baskets or drums, like those shown indeed in E12 and E13, there is no evidence that the use of equal diameter ends on tapered or conical baskets belong to common general knowledge of the skilled person. None of the documents relied upon by the appellant disclosing baskets with tapered or conical shapes (E7, Figures 5 and 6; E5, Figures 2, 7, 8; E11, Figure 1) disclose such diameter relationships either. Moreover, considering a design of the basket by starting from what the appellant considered a "natural" shape of generally cylindrical baskets would simply be altering the closest prior art without justification within the problem-solution approach being considered here. In respect to an objection starting from such a general cylindrical basket as known from E11, E12 or E13, see below points 6 to 8.

4.5 Based on the appellant's arguments, the Board thus concludes that starting from a basket according to E7 as the closest prior art, the subject-matter of claim 1 is not rendered obvious by common general knowledge or E11, E12 or E13.

5. E5 as the closest prior art

5.1 E5 discloses (see Figures 2, 7 and 8) a basket (44) for a drum-type washing machine. It is molded of a

synthetic resin (column 8, lines 5-17) and comprises a tapered sidewall (45) and front and rear walls (47, 45). The rear wall (47) is connected via an annular fluid balancer (46) to the sidewall, whereby the fluid balancer itself is received and connected at the inner circumference of a cylindrical end length of the conical side wall. The conical side wall's diameter decreases from rear to front. At the front side, the sidewall (45) connects to the front wall, integrally formed therewith, at an obtuse angle, as is apparent in Figure 2, in the lower right portion of the sectioned basket (44).

Laundry can be loaded into the basket through an opening (63) in a circumferential section of the side wall (45). It can be closed by a slidable cover (69) supported in slide grooves (64, 65) on the side wall.

According to column 11, lines 36-40, the diameter of the smoothly tapered side wall could increase in a stepped manner, which in the terminology of the claims of the patent in suit implies one or more steps in the side wall. A more detailed embodiment of such a structure is not disclosed in E5.

- 5.2 The appellant nevertheless deduced from this cited passage the existence of a cylindrical front length according to feature h2). A step would thus imply two cylindrical length sections on each side of a (sudden) diameter variation, the smaller diameter section thereof constituting said claimed cylindrical length. The Board finds however that a step must not necessarily comprise two cylindrical sections, rather the overall smooth tapered shape might just as well comprise stepped sections in which both sections on each side of a sudden diameter change can still be

tapered and would not necessarily lead to a cylindrical length. The Board thus concludes that there is no direct and unambiguous disclosure of feature h2) in E5.

5.3 Concerning the remaining features of claim 1, it is undisputed between the parties that, other than feature h2), only feature h3) is not disclosed in E5.

5.4 The objective technical problem based on the distinguishing features h2) and h3) can be considered to be the same as when starting from E7 as the closest prior art.

5.5 The appellant failed to persuade the Board that the solution to this problem would be obvious either in view of common general knowledge or in view of E12.

5.5.1 In regard to the appellant's general argument that equal cylindrical end diameter portions were well known, the conclusions drawn by the Board in regard to the corresponding objection based on E7 apply equally (see above point 4.4.2).

5.5.2 As to the appellant's other argument based on common general knowledge, according to which the fluid balancer's inner circumferential wall was considered to constitute a cylindrical rear length of the basket's side wall having a smaller rear diameter (d_r ; corresponding to reference number r18 in claim 1) than the basket's (tapered) front end (d_f ; corresponding to reference number r19 in claim 1), i.e. $d_r < d_f$, this would also not lead to a different conclusion as regards inventive step of the claimed feature combination. Accepting for the sake of argument the appellant's interpretation of the inner contour of the basket's side wall, the resulting relation $d_r < d_f$

purportedly then disclosed in E5 and the corresponding disclosure of the inverse relationship, $d_r > d_f$, by the basket of E7, this does not lead the skilled person without the exercise of an inventive step to the claimed solution based on only common general knowledge either. On the one hand, neither E5 or E7 can be considered to represent common general knowledge. Furthermore, E5 does not mention the diameter relationship between the front and rear side wall sections considered by the appellant. "Deriving" such a diameter relationship from schematic drawings of one document (E5) and comparing it with a corresponding inverse relationship derived from another document (E7) showing a basket of a completely different design, none of which *per se* constitutes common general knowledge, and concluding from their comparison that also a relationship $d_r = d_f$ would be considered by the skilled person, can only be seen to be based on hindsight. Finally, since the missing feature is not only h3), $d_r = d_f$, but also to have both ends, including the front length according to feature h2), formed by cylindrical lengths connecting to the respective front and rear walls, a basket based on E5 and with equal diameters at both ends would still have required further modification, without any obvious motivation to do so being present.

5.5.3 The Board thus concludes that starting from the basket of E5 as being the closest prior art, the subject-matter of claim 1 is not obvious in view of common general knowledge.

5.5.4 No other conclusion is reached when considering the combination of E5 with E12.

E12 discloses a deep drawing process for forming an

overall cylindrical basket made of steel sheet, which the appellant argued is a simpler process than the molding process required in E5.

This objection already starts from a different technical problem (finding a simpler manufacturing method) than the objective problem formulated on the basis of the distinguishing features. Already for this reason it is not convincing. Moreover, E12 does not attach any particular attention to the basket's side wall ends nor does it contain any indication of the manufacture of tapered baskets. As also further argued by the respondent, the manufacturing method of E12 is incompatible with the molded synthetic resin basket of E5. For example, the particularly shaped sliding grooves (65) formed integrally with the basket's side wall in a circumferential section thereof, could not be obtained by deep drawing a metal sheet. Forming a similar drum as disclosed in E5 but made of sheet metal by deep drawing would require a complete redesign of the drum in all its features, which would not be contemplated by the skilled person as a matter of common practice when trying to solve the objective technical problem.

- 5.6 The Board thus concludes that starting from a basket according to E5 as the closest prior art, the subject-matter of claim 1 is not rendered obvious by common general knowledge or by E12 (nor by any other document showing cylindrical drums with equal diameter ends, such as E13).

- 6. E11 as the closest prior art

- 6.1 E11 discloses (see Figure 1) a basket for a washing machine with a tapered side wall (2). Its diameter

increases from front to rear and comprises a stepped diameter increase in addition to the taper. The front wall connects to the side wall's tapered front end section and the rear wall (10) similarly to a tapered rear end section.

It is undisputed between the parties that features h1), h2), h3) are not disclosed in the basket according to Figure 1.

6.2 Figure 3 of E11 discloses a second embodiment of a basket which comprises a side wall having a cylindrical center section (column 2, lines 37-38). At both sides thereof there are end sections which extend in the direction of the longitudinal axis and connect to the respective front and rear walls. At their respective connection to the cylindrical center section, each of the side wall's end sections comprise a stepped diameter reduction. These end sections are literally disclosed as presenting a taper (column 2, line 40) for the explicit purpose of directing water, during spinning, to the central wall section, from where the water will be collected and drained to the exterior (column 2, line 40-42), (as also argued by the respondent). Figure 3 also illustrates such tapered side wall end sections. Whether this taper is slight or not, cannot be deduced from Figure 3 or the unambiguous content of the cited passage. Neither can it be understood as disclosing cylindrical front or rear lengths, as alleged by the appellant.

Therefore in addition to the undisputed distinguishing features d) and d1) (barycenter displacement to the rear), the basket according to Figure 3 of E11 also does not disclose at least features h1) and h2) of claim 1.

6.3 Starting from the basket of Figure 3 as the closest prior art and faced with the technical problem of reducing vibrations during the rotation, which can indeed be considered to constitute an objective problem based on the features d) and d1), and combining this with the basket of Figure 1, the skilled person would not arrive at the subject-matter of claim 1 without the exercise of an inventive step, contrary to what the appellant alleges.

Simply extending the cylindrical central side wall shown in Figure 3 to the rear wall, as argued by the appellant, would, in the Board's view, also not lead to feature h1), since no cylindrical end lengths are disclosed in E11. Nor would it lead to feature h3) ($d_r = d_f$). Prolonging the central cylindrical section of the basket's side wall in Figure 3 to the rear would clearly lead to a larger diameter at the (then cylindrical) rear end length. To then provide, at the rear end, an additional cylindrical length of reduced diameter for improving water back flow, as further argued by the appellant, is - besides addressing again a different technical problem which is unrelated to the previously identified objective problem - devoid of any technical sense, since a straight end wall would clearly provide better water back flow than a right-angle stepped rear wall.

6.4 For similar reasons, the Board does not find, when starting from either of the two embodiments mentioned before in E11 as the closest prior art, that the tapered baskets known from E5 or E7 would lead the skilled person in an obvious manner to the claimed combination of features. In any case, the appellant raised this objection simply without substantiation.

7. E12 as the closest prior art

7.1 E12 discloses a method for manufacturing a basket made of steel sheet using a deep drawing process. The resulting basket has cylindrical front and rear lengths of equal diameter. Between the cylindrical lengths are formed three deep drawn fields of increased diameter with overall rectangular shape. The deep drawn fields are symmetrically arranged with respect to the basket's center plane which extends perpendicular to its longitudinal axis.

The Board considers, that at least feature d1) is not known from E12.

7.2 The objective technical problem based on the distinguishing feature may be seen as improving the dynamic stability of the known basket by reducing oscillation of the basket during rotation, as argued by the appellant and also acknowledged by the respondent.

7.3 Neither the common general knowledge nor the disclosure of E5 or E7 lead however in an obvious manner to the combination of features of claim 1.

7.3.1 Even though it may be accepted that the use of tapered or conical baskets for reducing vibrations during the basket's rotation belongs to common general knowledge, as also acknowledged in the patent in suit in paragraph 7, to which the appellant referred in support of its argument, there is no evidence that such tapered baskets would commonly be provided with cylindrical rear and front lengths of equal diameter. Quite the contrary, the documents referred to by the appellant during the appeal procedure, for example E5 and E7,

which disclose tapered or stepped baskets, do not present these features (see above). Moreover, and as also pointed out by the respondent, E12 does not attach any particular importance to the configuration of the (cylindrical) rear and front lengths, let alone the diameter relation therebetween. The appellant's argument that cylindrical end configurations would form a kind of natural starting point in the design of a basket, since such cylindrical ends were intrinsic in the manufacturing method and would therefore be maintained by the skilled person, is not convincing since a tapered shape in the same way "naturally" excludes cylindrical end sections of equal diameter. Such thoughts arise only in knowledge of the invention rather than being considerations of the skilled person entrusted with the objective technical problem and common general knowledge.

- 7.3.2 For these reasons, the combination of the basket resulting from E12 with those known from E5 or E7 also does not lead the Board to a different conclusion.

- 8. E13 as the closest prior art

- 8.1 E13 discloses (see Figure 1) a basket (17) of a general cylindrical and symmetrical shape (see column 3, lines 23-29) for use in a fabric drying machine. In regard to the features of claim 1, the same differences established with respect to E12 are noted.

- 8.1.1 In the oral proceedings before the Board the respondent pointed to several particularities of the basket's arrangement in the dryer of E13 from which it emerged that the technical problem identified by the appellant based on the distinguishing feature d1), namely to reduce vibrations and oscillations during the basket's

rotation due to an unbalanced laundry (weight) distribution inside the basket, would not have been contemplated by the skilled person. The Board concurs with this view for the following reasons. First, and as mentioned above, the basket of E13 is used in a domestic dryer operating with reduced amounts of rinsing or washing liquids to perform "dry wash" or "dry rinse" methods of cleaning fabrics (see for example column 1, lines 6-20). Such drums are generally not rotated at high circumferential velocities, so that problems with vibrations or oscillations arising from uneven distribution of the laundry inside the drum are of little or no concern to the skilled person. Furthermore, the basket is supported at its rear side by a horizontal shaft (27), constituting its rotation axis, and at its front ends by idler rolls (24). The idler rolls ensure a horizontal rotation axis (see column 3, lines 43-51) and thus take up the load of the drum in case laundry would be distributed inside too much to the front. The problems identified by the appellant can objectively not be found to come into the mind of the skilled person.

The appellant did not refute the respondent's arguments in this regard.

- 8.1.2 Irrespective of the formulation of an objective problem, the skilled person would anyway not consider modifying the shape of the basket known from E13 so as to provide a (stepped) diameter increase from the front to the rear in its side wall and to thereby shift the barycenter to the rear. As pointed out by the respondent, the basket of E13 is required, in use, to have an even level of approximately 1 inch of liquid (see column 3, lines 23-31). A widening side wall with tapered or stepped diameter increase towards the rear,

such as known from E5 or E7, would not allow an even distribution of liquid throughout the basket's inner volume to be maintained. The appellant also did not refute this argument. In fact, under the constraint of an even liquid distribution in a basket with increasing diameter and a resulting barycenter shift would require substantial modifications of the basket's support structure and the overall design of the drying machine in E13 (e.g. downward inclination of the basket's support shaft/axis). Such modifications do not fall within the scope of the customary practice of the skilled person.

8.2 At least for these reasons the Board concludes that the subject-matter of claim 1 is not rendered obvious when starting from E13 as the closest prior art.

9. Admittance of E19 into the proceedings

9.1 Document E19 was submitted with the appellant's reply to the Board's communication setting out its preliminary opinion, thus after the time limit for filing the appeal grounds (Article 12(1) and (2) Rules of Procedure of the Boards of Appeal, RPBA). It therefore constitutes an amendment to the respondent's case.

9.2 According to Article 13(1) RPBA, any amendment to a party's case may be admitted and considered at the Board's discretion. The discretion shall be exercised in view of inter alia the complexity of the new subject-matter submitted, the current state of the proceedings and the need for procedural economy.

At least in regard to the required procedural economy a new prior art document should be *prima facie* relevant

in the sense that it is more relevant than the prior art already on file and is highly likely to have a bearing on the outcome of the procedure.

9.3 E19 discloses in Figures 2 and 3 an embodiment of a resin basket (69) which resembles the basket disclosed in E5. Instead of a tapered side wall (E5), it however comprises a cylindrical side wall (70), with an annular fluid balancer (71) attached near its rear end, the basket's rear wall (72) being fixed to the fluid balancer (see also page 7, lines 22-25). The Board cannot follow the appellant's argument that the basket discloses features d) and d1) and would thus lack only feature h3) ($d_f = d_r$) of claim 1. The justification for this argument provided by the appellant only during the oral proceedings, relies entirely on the Figures. The schematically shown configuration of the rear end of the baffles 73, to which the appellant referred for the first time during the oral proceedings in this respect, does not directly and unambiguously disclose features d) and d1) of claim 1.

9.4 E19, lacking seemingly at least features d), d1) and h3), appeared therefor to be of less relevance for the question of inventive step than, for example, document E5. The further arguments provided orally by the appellant in regard to Figure 28 of E19, showing also a cylindrical basket carrying a rubber band (171) around its outer circumferential surface, are far fetched in this context. The Board thus could not find that E19 was *prima facie* relevant in the above sense.

9.5 The Board thus exercised its discretion under Article 13(1) RPBA not to admit E19 into the proceedings.

10. In summary, the appellant did not convince the Board that the subject-matter of claim 1 lacks an inventive step in view of the prior art on file. The requirement of Article 56 EPC is therefore fulfilled.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:



M. H. A. Patin

M. Harrison

Decision electronically authenticated