Datasheet for the decision of 30 August 2006

Case Number: T 0452/05 - 3.2.04
Application Number: 98203309.4
Publication Number: 0904717
IPC: A47J 31/06
Language of the proceedings: EN

Title of invention:
Assembly for use in a coffee machine for preparing coffee, container and pouch of said assembly

Patentee:
Sara Lee/DE N.V.

Opponents:
02. Vomar Voordeelmarkt B.V.
04. Kraft Foods France
05. Kraft Foods Deutschland GmbH
06. Minges Kaffee GmbH & Co. KG

Headword:
Coffee pads

Relevant legal provisions:
EPC Art. 54, 56, 105

Keyword:
"Intervention of the assumed infringer"
"Novelty (yes) - implicit disclosure - generic/specific disclosure"
"Inventive step (no) - closest prior art - method step in device claim - reformulation of the problem"

Decisions cited:
T 0511/92, T 0823/96, T 0312/94, T 0870/95, T 0254/86, T 0644/97,

Catchword:
-
Case Number: T 0452/05 - 3.2.04

DECISION
of the Technical Board of Appeal 3.2.04
of 30 August 2006

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Composition of the Board:

Chairman: M. Ceyte
Members: M. Poock
C. Heath
Summary of Facts and Submissions

I. In its interlocutory decision posted on 21 February 2005, the opposition division decided on the amended form in which European patent no. 0 904 717 could be maintained.

II. The patent proprietor lodged an appeal (appellant 1) against this decision which was received with the appeal fee at the European Patent Office on 3 May 2005. The statement setting out the grounds of appeal was received on 4 July 2005.

Opponent 2 lodged an appeal (appellant 2) against this decision which was received with the appeal fee at the European Patent Office on 21 April 2005. The statement of grounds of appeal was received on 24 May 2005.

Opponent 3 lodged an appeal (appellant 3) against this decision which was received with the appeal fee at the European Patent Office on 21 April 2005. The statement of grounds of appeal was received on 28 June 2005.

Opponent 4 lodged an appeal (appellant 4) against this decision which was received with the appeal fee at the European Patent Office on 22 April 2005. The statement of grounds of appeal was received on 27 June 2005.

Opponent 5 lodged an appeal (appellant 5) against this decision which was received with the appeal fee and the statement of grounds of appeal at the European Patent Office on 11 April 2005.
Opponent 6 lodged a notice of intervention received at the European Patent Office on 14 April 2005 together with the opposition fee and a reasoned statement. Infringement proceedings were initiated by the patent proprietor against opponent 6 on 29 November 2004 by a request for an ex parte interim injunction. The requested injunction was granted ex parte on 29 December 2004 and served on opponent 6 on 17 January 2005.

Appellant 3 withdrew its opposition with letter of 30 January 2006.

III. The opposition division held that the grounds for opposition raised did not prejudice the maintenance of the patent in the form of the second auxiliary request filed on 17 January 2005.

IV. The following documents are relevant for this decision:

- E1: US-A-3 620 155,
- E2: US-A-3 450 024,
- E8: DE-U-7 430 109,
- E17: US-A-3 610 132,
- E40: DE-U-1 998 598.

V. Oral proceedings took place on 29 and 30 August 2006 and focused on the discussion whether the subject-matter of claim 1 meets the requirements on patentability with respect to documents E17, E8 and E40.

Appellant 1 (patent proprietor) requested that the decision under appeal be set aside and that the patent be maintained on the basis of the main request, or, in
the alternative, on the basis of one of the auxiliary requests 1-3, all filed with letter of 15 August 2006.

All other parties requested that the decision under appeal be set aside and that the European patent no. 0 904 717 be revoked.

VI. Claim 1 reads:

(a) Main request

"An assembly (1) for use in a coffee machine for preparing coffee, comprising a container (2) having a bowl-shaped inner space (6) bounded by a bottom (8) having at least one outlet opening (12) and a vertical sidewall (10) and, included in the inner space (6) of the container (2), a pill-shaped pouch (4) manufactured from filtering paper and filled with ground coffee, which pouch rests on the bottom (8) and extends over the bottom (8) to a position adjacent the sidewall (10), while provided in the bottom (8) are a number of channel-shaped grooves (14) extending in radial direction of the bowl-shaped inner space (6) to the at least one outlet opening (12) and, in use, hot water is fed under pressure to a top side of the container (2) by means of the coffee machine causing the hot water to be pressed from a top side of the pouch through the pouch for extracting the ground coffee included in the pouch, the coffee extract formed flowing from a bottom side of the pouch and from the container via the at least one outlet opening, characterised in that each of said grooves extends from a position (18) located at a distance from the sidewall (10) in a direction away from the sidewall (10)."
(b) Claim 1 of the auxiliary requests contain the following additional features in comparison with the respective foregoing request:

(i) First auxiliary request

"... wherein a bottom (22) of the pouch (4) has a shape substantially corresponding to the shape of the bottom (6) of the container (2)".

(ii) Second auxiliary request

"... the bottom (8) consisting of an outer horizontally directed annular bottom part (28) bounding the sidewall (10) and an inner saucer-shaped bottom part (30) bounding an inner edge (32) of the annular bottom part (28), the saucer-shaped bottom part (30) adjacent the annular bottom part (28) sloping downwards in a direction away from the sidewall (10), the grooves (14) extending in the saucer-shaped bottom part (30)"

(iii) Third auxiliary request

"... the pouch (4) comprising a disk-shaped top sheet (20) and a disk-shaped bottom sheet (22) which are interconnected adjacent their longitudinal edges, the interconnected parts of the top and bottom sheets forming an annular sealing seam (26)".
VII. Appellant 1 essentially argued that the subject-matter of claim 1 of each request was new and involved an inventive step for the following reasons:

(a) E17 does not disclose that the pouch is manufactured from filtering paper and that hot water is fed under pressure to a top side of the container. In its view, the term "under pressure" covers pressures of more than 1.5 bar above ambient pressure.

(b) The skilled person would not combine the teachings of documents E8 and E40 for the following reasons:

(i) Figure 3 of E8 did not represent the closest prior art, because it did not disclose that the pouch is made of filtering paper and, moreover, because E8 did not mention the bypass problem of the patent in suit (see patent specification, paragraph 0005). In the assembly of figure 3, the annular pouch seam is clamped, a feature that is not necessary in the claimed assembly.

(ii) E40 disclosed neither an assembly in which hot water is pressed through the coffee bed under pressure nor an assembly comprising a pouch. Moreover, a different problem was addressed therein, i.e. a slow filtering process, and a different solution, i.e. to increase the flow rate. The bypass problem was different in E40 as compared with the patent in suit.
VIII. The appellants 2, 4, 5 and the opponent 6 essentially argued that the subject-matter of claim 1 of each request lacked novelty and did not involve an inventive step for the following reasons:

(a) The embodiment shown in figures 5 and 6 of E17 discloses all features of claim 1 because, at the priority date of the contested patent, filtering paper was the prevalent water permeable material in common use in this field and the term "water permeable membrane" was a synonym and not the generic term for filtering paper.

(b) In view of the underlying problem to provide an alternative and improvement over the assembly of figure 3 of E8, it was obvious to the person skilled in the art to replace in the assembly of figure 3 of E8 the container's saucer-shaped bottom portion by the portion of E40's container bottom which is provided with upstanding projections. This would result in an assembly as covered by claim 1.

**Reasons for the Decision**

1. **Admissibility**

1.1 The appeals of the appellants 1, 2, 4 and 5 comply with the requirements of Articles 106 to 108 and Rules 1(1) and 64(b) EPC. Therefore, they are admissible.
1.2 Article 105 requires an intervention to be made within "three months of the date on which the infringement proceedings were instituted".

In this case, three dates could possibly have triggered the three months period: 29 November 2004, when the request for an interim injunction was made, 29 December 2004, when the request was granted, or 17 January 2005, when the injunctive order was served upon the opponent 6.

In the board's view, only the date when the order was served upon the opponent 6, i.e. 17 January 2005, should be the decisive point in time, as only from that date onwards could the opponent provide evidence of the proceedings that entitled it to intervene.

Since the notice of intervention was received at the European Patent Office on 14 April 2005, the intervention of opponent 6 complies with the three-month period under Article 105 EPC. The other requirements of this provision are also complied with. The intervention is therefore admissible.

2. Novelty – Document E17 – all requests

2.1 This document does not disclose the feature of claim 1 that the pouch is manufactured from filtering paper.

2.2 According to the well-established jurisprudence of the Boards of Appeal, any prior-art disclosure is novelty-destroying if the claimed subject-matter can be inferred directly and unequivocally from that disclosure, including features which for the skilled
person are implicit in what is explicitly disclosed (see e.g. T 511/92 of 27 May 1993, point 2.2, not published in the OJ EPO).

In this respect, the board concurs with the findings of T 823/96 (mentioned in Case Law of the Boards of Appeal, supra, page 220) that "implicit" matter must be a clear and unambiguous consequence of what is explicitly mentioned for the skilled person.

2.3 Figures 5 and 6 of E17 show an assembly for use in a coffee machine with a container 70 in which a pill-shaped pouch 25 is received. The ground coffee is enclosed in the pouch in a water permeable membrane 24 (see e.g. column 3, line 75 to column 4, line 1). However, the material of this membrane is not explicitly disclosed in this document.

2.4 It thus has to be evaluated whether the material is implicitly disclosed in this document.

2.4.1 It was argued that at the priority date of the contested patent, filtering paper was the prevalent water permeable material in common use in this field and that the term "water permeable membrane" was a synonym for filtering paper.

(a) The board appreciates that filtering paper has been commonly used in this field at the priority date of the contested patent. However, other filtering material also exists, namely cloth. The term "filtering paper" would therefore not be considered by the skilled person as the only possible interpretation, i.e. as the unambiguous
consequence of the term "water permeable membrane" explicitly disclosed.

(b) In essence, appellant 1 takes the view that the term "water permeable membrane" could only be understood by the skilled person in the light of his common general knowledge to mean filtering paper. The board does not agree with this view.

(i) To construe the meaning of terms in patent documents, the skilled person does not consider the terms in isolation from the remainder of the document, i.e. only in their literal meaning. On the contrary, the terms are considered in the context of the contents of the document as a whole (T 312/94 of 4 September 1997, catchword; not published in the OJ EPO).

When hot water is applied to the container 70, the membrane 24 is wetted and the lower portion thereof droops into the bowl-shaped lower part towards the ribs 81 (see column 4, lines 22-26 in connection with column 2, lines 53-56) to form a seal with the conical surface 84 of the container. The seal prevents the hot water from bypassing the pouch so that all of the fed water has to infuse the ground coffee enclosed therein (see column 4, lines 1-4 and 27-37).

The sealing interaction of the membrane 24 with the conical surface 84 (see figure 6) requires that the membrane is expansible to
a certain extent without tearing because otherwise it could not droop into the bowl-shaped lower part.

Thus, the person skilled in the art understands the term "water permeable membrane" in the context of E17 as a water permeable membrane which is expandable to an extent that it can droop into the bowl-shaped lower part without tearing.

(ii) Information allegedly forming part of the common general knowledge of the skilled person has to be proven, if contested. This is normally done by referring to text books or the like. A plurality of patent documents could also be suitable if they provide a consistent picture of the common general knowledge in a particular field.

In this case, textbooks or the like were not cited. Rather a plurality of patent documents were cited to demonstrate that the term "water permeable membrane" was a synonym for filtering paper. However, only E2 explicitly mentions that a water permeable membrane made of porous paper could be expandable (see column 3, lines 3-7). None of the other documents cited in the opposition mentions such a property of filtering paper.
Thus, it cannot be concluded that the cited patent documents provide a consistent picture of the meaning of the term "water permeable membrane" in this field.

(iii) Consequently, the board cannot conclude unequivocally that the skilled person would have understood the term "water permeable membrane" in the context of E17 only to mean "filtering paper".

(c) Moreover, the term "water permeable membrane" has to be regarded as the generic term for a group of at least two specific materials, i.e. cloth and filtering paper.

In principle, a specific term is not anticipated by a generic term. Nevertheless, in T 870/95 of 14 July 1998 (not published in the OJ EPO) an exception was made (see reasons, 3.3, last paragraph) if it were proven that, in the light of the common general knowledge, the generic term could only be understood in the meaning of the more specific term. Since this is not the case, as stated above, the board concludes that the generic term "water permeable membrane" does not anticipate the specific term "filtering paper".

2.4.2 Thus, E17 does not implicitly disclose the material of the "water permeable membrane".

2.5 The board therefore concludes that the subject-matter of claim 1 of the main and auxiliary requests 1 to 3 is novel having regard to E17 because a pouch manufactured
from filtering paper cannot be inferred directly and unequivocally therefrom.

3. Inventive step - main request

3.1 Closest prior art

3.1.1 Several documents were cited regarding the closest prior art for the subject-matter of claim 1. The board considered in particular documents E17, E8 and E1 which all relate to the same technical field and require only few structural modifications to arrive at the assembly of claim 1. Therefore, in principle, they all qualify as closest prior art.

In accordance with the established jurisprudence of the Boards of Appeal, the closest prior art may be the objectively most promising springboard towards the invention which was available to the skilled person (see e.g. T 254/86, point 15, OJ EPO 1989, 115).

3.1.2 E8 versus E1

A problem of the assembly known from E1 is the so-called bypass effect, i.e. that in use, a portion of the hot water that is poured onto the pouch flows along its seam to the end of a groove located at a corner point of the container bottom and then through the seam to the outlet opening. As a consequence, not the complete amount of the hot water flows through the coffee powder containing portion of the pouch to the outlet opening.
In the assembly known from figure 3 of E8, this problem is already solved by clamping the annular pouch seam and also by providing the peripheral portion of the container bottom inside its surrounding portion supporting the pouch seam without openings, so that the coffee extract can hardly flow from the peripheral portion of the pouch, if at all.

Thus, in the board's view, the assembly of figure 3 of E8 would be a more suitable starting point for the skilled person to commence invention than the assembly of E1.

3.1.3 E8 versus E17

(a) Wording of claim 1

Claim 1 relates to an assembly for use in a coffee machine for preparing coffee. Such wording implies that the assembly has to be suitable for this use but does not claim the coffee machine itself.

The claim further includes the indication that, in use, hot water is fed under pressure to a top side of the container by means of the coffee machine which relates to the operation of the coffee machine. Thus, claim 1 contains features of two different patent categories, i.e. a method step (on the operation of the coffee machine) in a device claim.

This method step limits the subject-matter of claim 1 only insofar as it implies that the assembly has to be suitable for use with a coffee
machine which is operated as mentioned, i.e. in which hot water is fed under pressure to the top side of the container.

The term "under pressure" covers relatively low pressures (such as the 1.5 bar above ambient pressure stated by appellant 1) and also higher pressures (such as the 7 to 15 bar of some espresso machines).

Thus, in the board's view, the assembly has to be suitable to be used in a coffee machine in which hot water is fed at relatively low pressures. But it also has to be suitable to be used in a coffee machine in which hot water is fed at a higher pressure.

(b) In figures 5 and 6, E17 discloses an assembly with a container of the percolator-type to which hot water from a coffee machine is fed. The water builds-up in the container and is forced through the pouch by its hydrostatic pressure.

E8, on the other hand, in figure 3 discloses an assembly with a container in which hot water is forced through the pouch by the pressure supplied by the coffee machine (see page 1, line 2 from bottom to page 2, line 3).

There can be no doubt that the assembly shown in figure 3 of E8, where the pouch bottom has a shape substantially corresponding to the shape of the container bottom, is able to resist higher pressures than the assembly of E17, where the
pouch bottom is not supported on a substantial part of its surface, and is thus more suitable for use in high pressure coffee machines.

Therefore, in the board's view, the assembly of figure 3 of E8 is a more suitable starting point for the skilled person to commence invention than the assembly of E17.

3.1.4 For these reasons, the board considers the assembly of figure 3 of E8 to be the most promising springboard towards the invention.

3.1.5 The board does not share the view of appellant 1 that figure 3 of E8 does not represent the closest prior art, because it does not disclose that the pouch is made of filtering paper and, moreover, because E8 does not address the bypass problem.

(a) For the assembly shown in figure 3, the filtering material is not explicitly specified in E8, but, following the principles mentioned in section 2.2 above, it is implicitly disclosed therein.

(i) E8 explicitly discloses that the round filtering sheet 110 in the embodiment of figures 5 and 6 is made of filtering paper (see page 5, bottom). This sheet only has to cover the openings in the bottom so that the coffee powder is retained. It is evident for the skilled person that the filtering material of the pouch 88 of figures 3 and 4 has to meet the same requirements. Moreover, the pouch has to be cheap and easy to
manufacture. Thus, the clear and unambiguous consequence of the explicit disclosure of filtering paper in the embodiment of figures 5 and 6 for the skilled person is that the pouch 88 of the embodiment of figures 3 and 4 is made of the same material.

(ii) These findings are in line with those mentioned in section 2.4 above. When the skilled person reads the description relating to the assembly of figure 3, he would do so in the light of what is disclosed for the assembly of figures 5 and 6. Since it is evident for him that the pouch of figures 3 and 4 and the filtering paper of figures 5 and 6 mainly have to cover the openings in the bottom to retain the coffee powder, i.e. there is no risk for the material to rupture, the term "filtering material" in E8 will be understood to mean only filtering paper.

(b) It is true that for the assembly of figure 3 of E8 the bypass problem is not explicitly mentioned. However, in view of documents E1 (see column 3, lines 27-31 and 65-67), E2 (column 4, lines 1-9), E17 (column 4, lines 35-37) and E40 (page 6, lines 6-10 from bottom), it is evident that the skilled person is aware of this problem and would consider this when reading E8. Moreover, there was no need to recite this problem because the annular seam of the pouch 88 is clamped between the container 96 and the cover 94 (see page 5, third paragraph, lines 7-9 in connection with figure 3)
so that the liquid in the inner space 86 cannot bypass the seam of the pouch.

(c) Appellant 1 also argued that E8 teaches to clamp the seam of the pouch, a feature not necessary in the claimed assembly.

However, the wording of claim 1 does not exclude that the seam may be clamped. Thus, this argument is not supported by the wording of the claim.

3.1.6 Consequently, the board considers the assembly of figure 3 of E8 to be the closest prior art.

3.2 Derivation of the technical problem

3.2.1 It is established jurisprudence of the Boards of Appeal that an objective definition of the technical problem to be solved should normally start from the technical problem that is described in the patent in suit. Only if it turns out that an incorrect state of the art was used to define the technical problem or that the technical problem disclosed has in fact not been solved, can an inquiry be made as to which other technical problem objectively existed (see e.g. T 644/97 of 22 April 1999, point 2.3, not published in the OJ EPO).

The technical problem to be solved is specified in paragraph 0005 of the patent specification and is based on the disclosure of document E1. There, some of the water fed to the container is able to bypass the pouch via its seam without flowing through its coffee powder containing portion. The closest prior art document is,
however, E8, in which the bypass problem is already solved (see section 3.1.5(b) above).

Therefore, it is necessary to reformulate the technical problem based on the assembly of figure 3 of E8 as closest prior art.

3.2.2 Distinguishing features

The subject-matter of claim 1 is distinguished from this assembly by the following features:

(d1) provided in the bottom are a number of channel-shaped grooves extending in radial direction of the inner space to the at least one outlet opening and
(d2) each of said grooves extends from a position located at a distance from the sidewall in a direction away from the sidewall.

It should be noted that the claim covers in particular grooves formed by interspaces between vertical projections on the container bottom (see figures 7 to 10 and granted claim 5). The following analysis of the effects is based on such grooves.

3.2.3 Effects of the distinguishing features

(a) In the assembly of figure 3 of E8, the flow of coffee extract from the pouch is inhibited where the pouch 88 directly rests on the bowl-shaped bottom, e.g. at the interspaces between the openings 102. It can flow from the pouch only at the positions of the openings 102.
(b) The provision of feature d1 in the assembly of figure 3 of E8 ensures that the coffee extract can flow from the pouch 88 into the radially extending grooves (formed by the interspaces between the vertical projections on the container bottom). The flow through the pouch is thus equalised so that the filtering efficiency is increased.

The provision of feature d2 in the assembly of figure 3 of E8 ensures that the annular seam of the pouch can still be properly clamped between the upper part 94 and lower part 96 such that the liquid in the filtering chamber 86 cannot bypass through the pouch seam. Thus, the complete amount of hot water fed to the container has to flow through the coffee powder containing portion of the pouch which in turn also increases the filtering efficiency.

(c) In general, any effect provided by the invention may be used as a basis for the reformulation of the technical problem as long as said effect is derivable from the application as filed (see Guidelines for Examination in the European Patent Office C-IV, 9.8.2, third paragraph from the bottom).

The board has no doubts that the effects mentioned above are derivable from the application as filed.

(i) The effects of feature d1 are based on the disclosure on page 7, lines 22-25 of the application as filed which are related to
the coffee-making efficiency (see page 7, lines 26, 27).

(ii) The effects of feature d2 are based on the disclosure on page 7, line 34 to page 8, line 10 of the application as filed which is also related to the coffee-making efficiency.

3.2.4 Formulation of the problem

In view of the foregoing, starting from the assembly of figure 3 of E8 as closest prior art, the technical problem to be solved is to provide an assembly for use in a coffee machine for preparing coffee in which the filtering efficiency is increased.

3.3 Obviousness of the solution

3.3.1 E40 relates to a filter for preparing coffee in a coffee machine (see page 4, third paragraph).

(a) First the shortcomings of conventional filters are described in which a filter insert rests on the bottom of a bowl-shaped container. The bottom is provided with channels sloping towards an outlet opening. Where the filter insert is directly supported on the bottom surface, the coffee extract cannot flow from the filter insert. It can only flow from the insert where it is unsupported, i.e. where the channels are located. Since the unsupported surface of the filter insert is much smaller than the supported surface, the effective filtering surface where the coffee extract can flow from the filter insert is relatively small so
that the filtering efficiency is low (see page 1, paragraph 1, lines 1-13).

E40 discloses the problem to be solved as the provision of a filter in which the filtering efficiency is increased while the dimensions of the known filters are maintained (see page 2, first sentence).

This problem is solved by a container bottom which is provided with a plurality of upstanding projections of small cross-section such that the supported surface takes only a small fraction of the total surface of the filter insert (see page 2, paragraph 1, second sentence). Thus, channel-shaped grooves are formed by the interspaces between the upstanding projections which extend in radial direction of the inner space to the outlet opening 27 (see figures 2 and 3), which corresponds to the distinguishing feature d1.

By this, the effective filtering surface is increased, which ensures an improved flow of coffee extract from the filter insert to the outlet opening.

(b) Moreover, in this context it is taught that the container bottom 26 is provided with an annular rim 31 in the vicinity of the sidewall 22, the upper surface of the container being flush with the end faces of the vertical projections (see e.g. figure 3, page 2, last paragraph and claim 5). Thus, each of said grooves extends from a position located at a distance from the sidewall 22 in a
direction away from the sidewall, which corresponds to the distinguishing feature d2.

In use, a paper filter insert is placed in the container and coffee powder is added on top. When hot water is fed to the inner space of the container, the annular seam of the filtering sheet is forced against the annular rim 31 of the container. This ensures that the liquid in the inner space does not flow into the outlet opening without having passed through the filter insert, as this would reduce the filtering efficiency.

(c) Thus, it can be stated that document E40 relates to the same technical field, addresses in essence the same technical problem and proposes in essence the same features for its solution as the assembly of claim 1.

3.3.2 Therefore, it would have been obvious to the person skilled in the art to replace the saucer-shaped bottom portion of the container in the assembly of figure 3 of E8 by the portion of E40's container bottom which is provided with the upstanding projections in order to arrive at an assembly as covered by claim 1.

3.3.3 However, according to appellant 1, the skilled person would not have combined the teachings of documents E8 and E40 in the first place. The board does not share the view.
(a) It was argued in this respect that E40 neither discloses that hot water is pressed through the coffee bed under pressure, nor an assembly comprising a pouch.

The teaching of E40 relates to the interaction of the container bottom with the filter insert. By reducing the supported surface of the filter insert, the effective filtering surface is increased and thus the flow of coffee extract from the filter insert is improved (see page 2, paragraph 1, second sentence). This teaching does not depend on the feeding pressure or the type of filter insert.

Moreover, it should be recalled that claim 1 only requires (see section 3.1.3(a) above) that the assembly and its container have to be suitable for use with a coffee machine which feeds hot water under pressure to a top side of the container. The filter is disclosed for use with coffee machines (see page 4, lines 8-10), thus also for machines which create a higher pressure in the inner space of the container. Therefore, the board has no doubt that the assembly of E40 and its container are suitable to be used with the pressure under which the assembly of figure 3 of E8 is operated.

(b) Appellant 1 also argued that a different problem was addressed in E40, i.e. that the long filtering time causes the hot water to cool down, and a different solution was proposed, i.e. that of increasing the flow rate.
It is true that the effects of a long filtering time are discussed in E40. However, these effects do not address a problem different to the one disclosed on page 2, first sentence, because they are still related to the small effective filtering surface which causes the low filtering efficiency (see page 1, lines 13 –18).

Moreover, E40 not only teaches to increase the flow rate but also indicates how a proper flow from the filter insert can be achieved.

(c) Appellant 1 also argued that E40 disclosed a different bypass problem than the patent in suit.

In fact, the bypass effects described in the patent in suit and in E40 are slightly different. According to the patent, the fed water should not flow through the pouch seam to the outlet opening, whereas according to E40 it should be avoided that the fed water flows around the insert edge to the outlet opening, thus not through the insert.

However, both effects are related to the filtering efficiency. This is why the skilled person would have been prompted by E40 to position the grooves at a distance from the container sidewall of the assembly of figure 3 of E8.

(d) Therefore, the board sees no reason why the skilled person would not have been prompted to combine the teachings of documents E8 and E40 to arrive at an assembly as covered by claim 1.
3.4 In view of the foregoing, the board concludes that the subject-matter of claim 1 does not involve an inventive step as required by Articles 52(1) and 56 EPC. Consequently, the main request is not allowable.

4. Inventive step - auxiliary requests

4.1 Auxiliary request 1

The feature added to claim 1 of the main request is known from E8. Figure 3 shows that the bottom of the pouch 88 has a shape substantially corresponding to the shape of the bottom of the container. Thus, it has to be concluded that the subject-matter of claim 1 does not involve an inventive step for the same reasons as set out above for claim 1 of the main request.

4.2 Auxiliary request 2

The only feature added to claim 1 of the foregoing request which is not known from E8 is that grooves extend in the saucer-shaped bottom part. However, this is in fact revealed by the obvious combination of E8 and E40 (see section 3.3.2 above). Thus, it has to be concluded that the subject-matter of claim 1 does not involve an inventive step for the same reasons as set out above for claim 1 of auxiliary request 1.

4.3 Auxiliary request 3

The features added to claim 1 of the foregoing request are also known from E8. Figure 4 and page 5, paragraph 3 disclose that the pouch 88 comprises a disk-shaped top sheet 90 and a disk-shaped bottom sheet.
92 which are interconnected adjacent their edges, the interconnected parts of the top and bottom sheets forming an annular sealing seam. Thus, it has to be concluded that the subject-matter of claim 1 does not involve an inventive step for the same reasons as set out above for claim 1 of auxiliary request 2.

4.4 Consequently, the auxiliary requests are also not allowable.

**Order**

*For these reasons it is decided that:*

1. The decision under appeal is set aside.

2. The European patent is revoked.

The Registrar: The Chairman:

V. Commare M. Ceyte