

Internal distribution code:

- (A) Publication in OJ
(B) To Chairmen and Members
(C) To Chairmen
(D) No distribution

**Datasheet for the decision
of 19 November 2007**

Case Number: T 1125/05 - 3.2.04

Application Number: 00954082.4

Publication Number: 1204351

IPC: A47J 31/00

Language of the proceedings: EN

Title of invention:

Methods and systems for utilizing delayed filtering to provide customized varieties of fresh-brewed coffee on-demand

Applicant:

THE PROCTER & GAMBLE COMPANY

Opponent:

-

Headword:

-

Relevant legal provisions (EPC 1973):

EPC Art. 56, 92, 111, 114
RPBA Art. 10b(3)

Keyword:

"Inventive step (main, auxiliary requests 1, 2, 2A, 3, 3A, 4, 4A): no"

"Admission of request filed at oral proceedings (auxiliary requests 5, 5A): no - subject-matter not previously claimed - additional search"

Decisions cited:

G 0010/93

Catchword:

-



Case Number: T 1125/05 - 3.2.04

D E C I S I O N
of the Technical Board of Appeal 3.2.04
of 19 November 2007

Appellant:

THE PROCTER & GAMBLE COMPANY
One Procter & Gamble Plaza
Cincinnati, OH 45202 (US)

Representative:

F. Niemann
Cabinet Plasseraud
52 rue de la Victoire
F-75440 Paris Cedex 09 (FR)

Decision under appeal:

Decision of the Examining Division of the
European Patent Office posted 30 March 2005
refusing European application No. 00954082.4
pursuant to Article 97(1) EPC.

Composition of the Board:

Chairman: M. Poock
Members: A. de Vries
C. Heath

Summary of Facts and Submissions

I. This appeal lies from the decision of the Examining Division posted 30 March 2005 in which European patent application No. 00 954 082.4 was refused.

The Examining Division held that the subject-matter of claims 1 to 15 did not meet the requirements of Articles 52(1) and 56 EPC because it did not involve an inventive step having regard to document FR-A-2 758 962 (B2) and the skilled person's common general knowledge. The claimed minimum delay for filtering of the coffee extract could be arrived at by routine trial for achieving a beverage having a desired strength.

II. The Appellant (Applicant) lodged the appeal against this decision on 29 May 2005 and paid the prescribed appeal fee on 2 June 2005. The statement setting out the grounds of appeal was received on 8 August 2005.

III. With the summons to oral proceedings, the Board referred, inter alia, to the following documents and expressed doubts whether the subject-matter of claim 1 was new and inventive:

B1: "KAFFEE VON DER BOHNE ZUM ESPRESSO", Francesco und Ricardo Illy, Edition Spangenberg, ISBN: 3-89409-081-2, 1993, pages 86, 87, 160-164;

B5: EP-A-0 079 235.

Document B1 was not cited in the Search Report but by the Board under the provision of Article 114(1) EPC.

IV. With the letter of 5 October 2007, the Appellant submitted a main request and auxiliary requests 1 to 3 to substitute the pending requests.

V. The oral proceedings before the Board took place on 19 November 2007 in which the pending auxiliary requests 1 to 3 were renumbered 2 to 4 and new auxiliary requests 1, 2A, 3A, 4A, 5 and 5A were submitted.

The discussion focused on whether the subject-matter of claim 1 involved an inventive step over the method known from document B1 when the general technical knowledge of the skilled person is taken into consideration, and on the admissibility of auxiliary requests 5 and 5A.

VI. The Appellant requested that the decision under appeal be set aside and a patent be granted based on the main request filed with letter of 5 October 2007, or on one of the auxiliary requests 1, 2, 2A, 3, 3A, 4, 4A, 5 or 5A.

VII. Claim 1 reads:

(a) Main request

"A method for making multiple servings of an individually customized coffee beverage product from one brew cycle and delivering it to a consumer, characterized in that customization of a fresh brewed coffee extract, based on the individual consumer's selection, is provided just prior to dispensing, after the extract has been allowed to brew and held as an

extract before filtering, wherein the filtering of the coffee extract is delayed for a minimum period of about 30 minutes to about 48 hours after the onset of brewing of the extract".

(b) Auxiliary request 1

Claim 1 is as in the main request with the addition "on demand" after "a consumer" in the first claim portion.

(c) Auxiliary request 2

Claim 1 is as in auxiliary request 1, but the wording "characterised in that customization of a fresh brewed coffee extract" was amended (addition underlined by the Board) to read "wherein customization of a fresh brewed coffee extract by dilution with an amount of water from zero to about 1:15 coffee/water" and "before filtering" to read "before filtering, wherein the coffee extract has a minimum brew solids of greater than about 1.2% and".

(d) Auxiliary request 3

Claim 1 is as in auxiliary request 2, but the feature "wherein the coffee extract has a minimum brew solids of greater than about 1.2% and" was amended (addition underlined by the Board) to read "wherein the coffee extract has a minimum brew solids of greater than about 1.2% and is cooled to less than 170°F and".

(e) Auxiliary request 4

In this request, apart from a minor amendment, the following feature was added to claim 1 of auxiliary request 3: "and wherein the method includes coordinating the rate and flow of two diluting lines, one for hot water at 170-200°F and one for cold water at 40-80°F to deliver the coffee to each individual consumer at their preferred temperature".

(f) Auxiliary request 5

Claim 1 is as in auxiliary request 4, but the feature "less than 170°F" was amended to read "between 35°F and 50°F".

(g) Auxiliary requests 2A, 3A, 4A, 5A

These requests correspond respectively to auxiliary requests 2, 3, 4 and 5 with the addition "on demand" after "a consumer" in the first claim portion.

VIII. The Appellant argued that the subject-matter of claim 1 of all requests involves an inventive step, and referred essentially to the following:

- (a) The claimed method is directed to delivering multiple servings of an individually customised coffee beverage product (especially of customised strength) of good quality from one fresh brewed extract.

- (b) The closest prior art is known from document B1.

However, it does not disclose the features relating to the delayed filtering of the extract and to the individual customisation of the coffee beverage. The wording in claim 1 "multiple servings of an individually customised coffee beverage product" requires that each serving is individualised and not, as in document B1, the whole content of its pot.

Moreover, it relates only to a brewing method and does not address the holding of the brew at all.

- (i) In the oral proceedings before the Board, it was highlighted that the meaning of the terms "holding" and "brewing" as used in the application was different. They describe successive time periods, first the extract is brewed, then, when brewing has finished, the extract is held.

The extraction of substances finishes already 15 minutes after the onset of brewing because at that point in time, the brewed extract is already saturated and brewing has effectively stopped. From then onwards the brew is only held as an extract. However, it was accepted that the transition from brewing to holding might be a gradual process and that a brew of solids of 1.2 to 1.6 %wt is typical for a drinkable coffee beverage.

The holding of the brew for at least 30 minutes enables to keep under proper conditions a sufficient amount of a brew to satisfy the demand of several customers. By "proper conditions", it is meant that the reaction products formed during holding will be minimized or at least immobilized so as not to give the finished beverage a bad taste.

- (ii) It was also emphasised in the oral proceedings that these effects were not surprising for the skilled person, because they could be explained by an absorption of these reaction products and the buffering of the acids on the coffee grounds during holding.

- (c) The problem to be solved is to provide an improved method for providing an individually customised fresh brewed coffee beverage on demand in a wide range of variety and strength (see page 4, line 23 to 25 of the application). This is attained by holding the brew for some time before filtering and dispensing the brew according to the consumer's preference.

- (d) Since there is no teaching in the available prior art for holding the brew as specified in claim 1, the invention set out in claim 1 could not have been obvious.

Reasons for the Decision

1. The appeal complies with the requirements of Article 106 to 108 and Rules 1(1) and 64 EPC. It is therefore admissible.
2. *Main request - inventive step - claim 1*
 - 2.1 The closest prior art method is the "Melior" - method mentioned in document B1 (see B1, page 163, left-hand column to right-hand column, line 7) as agreed by the Appellant.
 - 2.1.1 In this method, hot water is poured into a glass pot containing the appropriate amount of ground coffee where it remains for at least 5 minutes to form an infusion before it is filtered.
 - (a) The application uses the terms "holding" and "brewing". Contrary to the Appellant's view, these do not describe successive time periods but rather overlap. The "hold-time" is defined on page 10, lines 23 to 25 of the application to mean the period of time from the onset of brewing of the extract until filtering begins.
 - (b) Thus, in the wording of claim 1, this infusion has been allowed to brew and held as an extract before filtering.
 - 2.1.2 In the "Melior" - method, the coffee is filtered by pushing a metallic filter downwards in the pot. The ground coffee remains trapped between the metallic filter and the bottom of the pot whereas the filtered

coffee extract is above the filter and can be delivered from the pot.

Since filtering represents one way of individual customisation (see application, e.g. page 12, lines 26 to 28), the filtered coffee extract, in the wording of claim 1, is individually customized from the fresh brewed coffee extract, based on the individual consumer's selection just prior to dispensing.

- 2.1.3 The wording in claim 1 "multiple servings of an individually customised coffee beverage product" covers not only that each serving is individualised but also that the whole content of the pot is individualised, e.g. by filtering.

In view of this, the method of document B1 may well serve, in the wording of claim 1, for making multiple servings of an individually customized coffee beverage product from one brew cycle because a "Melior" - pot typically has the volume for multiple servings.

- 2.1.4 In B1, the filtering of the coffee extract is delayed for at least 5 minutes. An upper limit is not disclosed. In contrast thereto, claim 1 requires that the filtering is delayed for a minimum period of about 30 minutes to about 48 hours.

Thus, the known range overlaps with the claimed range for the filtering delay. There is no need to decide whether this fact establishes the novelty of the subject-matter of claim 1, because, in any event, it is not based on inventive considerations, as will be explained below.

2.2 Problem and solution

The technical problem can be defined as to provide a method for making multiple servings of an individually customized coffee beverage product from one brew cycle in which various consumer preferences regarding body character and consistency of the finished beverage are accommodated (see application, page 5, paragraph 2). This problem complies in essence with the aim mentioned in the application on page 4, lines 17 to 20. Typically such problem is addressed by a person skilled in the field of coffee preparation, such as a food chemist.

According to page 5, paragraph 2 of the application, the solution to this problem is achieved by "delayed filtering" expressed in the distinguishing feature of claim 1.

2.3 Obviousness of the solution

2.3.1 In this context, it has to be evaluated whether the prior art addresses the "delayed filtering" aspect rather than, as argued by the Appellant, whether the available prior art provides any teaching for holding the brew for extended periods of time.

2.3.2 It is commonly known and in particular to the person skilled in this field, that the infusion time, that is the time in which the ground coffee is in contact with the heated water, is decisive for the quality, in particular the taste of the coffee.

This is evidenced, for instance, by document B5.

Document B5 relates to filter type coffee machines for preparing a coffee beverage by infusion. By varying the infusion time, different tastes can be obtained (see page 2, paragraphs 2 and 3) because the extraction of the substances giving the taste is dependent on this time (see page 5, paragraph 2). The infusion time is selected so that the consumer taste preferences are met, i.e. a mild taste requires a short contact time, whereas a bitter taste requires a long contact time (see page 13, lines 21 to 25).

- 2.3.3 In view of the common general knowledge and with the aim of accommodating various taste preferences in accordance with the problem stated above, the skilled person has an incentive to test the "Melior" - method for the effects of a variation of the infusion time on the quality and consistency of the coffee. In particular it would prompt him to determine the effect a long brewing time might have on the taste of the coffee such as its bitterness. These tests are routine and lead him at least into the lower portion of the claimed range without requiring inventive considerations. It is therefore obvious for the skilled person to extend the infusion time of the "Melior" - method to the claimed range.
- 2.3.4 In this regard, as acknowledged by the Appellant, the claimed time range is not associated with any particular surprising effect because, so the Appellant argued, the processes involved are understood and as expected by the skilled person. This confirms the Board in its view that the claimed time range is merely the result of routine experimentation, as the skilled person realizes from

general considerations that these processes influence the taste of the resultant beverage. It stands to reason that he will examine the relationship between the processes and taste more closely in routine trials so as to optimize these processes with regard to coffee taste. He will do so for example by varying a process parameter such as time and logging its effect on taste. These routine trials will yield as a matter of obviousness a time range producing what the tester perceives as optimal coffee taste. As taste is a subjective sensory perception, it is clear that the particular resultant time range will depend on subjective criteria. In summary the claimed time range is thus regarded as the result of routine experimentation or optimization with respect to purely subjective criteria.

2.4 Hence, 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.

3. *Auxiliary requests - inventive step - claim 1*

3.1 Auxiliary request 1, 2A, 3A and 4A

It is inherent in the "Melior" - method that the coffee is prepared and delivered "on demand" as this is the sole manifest purpose of preparing coffee. Therefore, the added feature in claim 1 cannot add anything inventive to its subject-matter.

3.2 Auxiliary requests 2 and 3

3.2.1 According to the amended claim 1 of auxiliary request 2, the coffee extract is diluted with an amount of water from zero to about 1:15 coffee/water. Thus, in case of zero dilution, the only added feature is that the coffee extract has a minimum brew of solids of greater than about 1.2%. However, as acknowledged by the Appellant, a brew of solids of 1.2 to 1.6 %wt is typical for a drinkable coffee beverage.

3.2.2 Usually, a freshly brewed coffee has to cool down before drinking. The drinking temperature lies within the range claimed with the amendment in claim 1 of auxiliary request 3, i.e. less than 170°F or 76°C.

3.2.3 Hence, the amendments in claim 1 of these requests do not require inventive considerations. Rather, they are the inevitable result of the preparation of a drinkable coffee beverage.

3.3 *Auxiliary request 4*

3.3.1 It is commonly known to accommodate the temperature and strength of a coffee or tea beverage to a consumer's preference by adding either hot or cold water. A beverage which is too strong is diluted by the addition of water. Also, when it is too hot, cold water is added, when it is too cold, hot water is added.

Therefore, the added feature in claim 1, to coordinate the rate and flow of two diluting lines, one for hot water at 170-200°F and one for cold water at 40-80°F to deliver the coffee to each individual consumer at his

or her preferred temperature, cannot add anything inventive to its subject-matter.

3.3.2 Consequently, also auxiliary requests 1, 2, 2A, 3, 3A, 4 and 4A are not allowable.

4. *Auxiliary requests 5, 5A*

4.1 Article 10b(3) of the Rules of Procedure of the Boards of Appeal (RPBA) stipulates that amendments to a party's case after oral proceedings have been arranged shall not be admitted if they raise issues which the Board cannot reasonably be expected to deal with without adjournment of the oral proceedings.

4.2 The amendments concerned are in claim 1 and require the coffee extract to be cooled to between 35°F and 50°F.

4.2.1 Since this feature was not previously claimed, in fact it is only disclosed on page 14, line 2 of the application's description, the Board has doubts whether the newly claimed subject-matter of these requests has been searched for.

4.2.2 Under Article 92(1) EPC, the Search Division shall draw up the European search report on the basis of the claims with due regard to the description and the drawings. However, the Board does not know to which extent the description and the drawings had been taken into account, and in particular whether the search covered this particular temperature range. Moreover, it does not appear that the subject-matter of claim 1 of these requests has yet been considered by the Examining Division.

4.2.3 According to Article 111(1) second sentence, the Board could search and examine this new subject-matter or remit the case to the Examining Division for further prosecution, in particular to decide if an additional search is required. Since proceedings before the Boards of Appeal in ex-parte cases are primarily concerned with examining the contested decision (see G 10/93, reasons No. 4; OJ EPO 1995, 172), the second alternative would appear more appropriate.

Either way, the oral proceedings would need to be adjourned.

4.3 Hence, different from the auxiliary requests 1, 2A, 3A, and 4A, auxiliary requests 5 and 5A raise issues which the Board cannot reasonably be expected to deal with without adjournment of the oral proceedings. Consequently and in accordance with Article 114(2) EPC, auxiliary requests 5 and 5A were not admitted into the proceedings.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:

G. Magouliotis

M. Poock