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**Datasheet for the decision  
of 21 February 2022**

**Case Number:** T 0864/19 - 3.2.07

**Application Number:** 12720373.5

**Publication Number:** 2714577

**IPC:** B67D1/00, B67D1/06, B67D1/08

**Language of the proceedings:** EN

**Title of invention:**  
MULTI-TOWER MODULAR BEVERAGE DISPENSING SYSTEM

**Patent Proprietor:**  
Pepsico, Inc.

**Opponent:**  
Mathys & Squire LLP

**Headword:**

**Relevant legal provisions:**  
EPC Art. 54, 56, 100(a)

**Keyword:**  
Novelty - main request (yes)  
Inventive step - main request (yes)

**Decisions cited:**

**Catchword:**



**Beschwerdekammern**

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Case Number: T 0864/19 - 3.2.07

**D E C I S I O N**  
**of Technical Board of Appeal 3.2.07**  
**of 21 February 2022**

**Appellant:**

(Opponent)

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**Respondent:**

(Patent Proprietor)

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**Representative:**

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**Decision under appeal:**

**Decision of the Opposition Division of the  
European Patent Office posted on 21 January 2019  
rejecting the opposition filed against European  
patent No. 2714577 pursuant to Article 101(2)  
EPC.**

**Composition of the Board:**

**Chairman**

I. Beckedorf

**Members:**

S. Watson

A. Beckman

## **Summary of Facts and Submissions**

- I. The opponent (appellant) lodged an appeal within the prescribed period and in the prescribed form against the decision of the opposition division rejecting the opposition against European patent No. 2 714 577.
- II. The opposition division found that none of the grounds for opposition raised by the appellant under Article 100(a) and (b) EPC, namely lack of novelty, lack of inventive step and lack of sufficiency of disclosure, prejudiced the maintenance of the patent as granted.
- III. In preparation for oral proceedings scheduled at the request of both parties, the Board gave its preliminary assessment of the case in a communication pursuant to Article 15(1) RPBA 2020, dated 3 September 2021. The Board indicated in its preliminary opinion that none of the objections raised by the appellant in its statement of grounds of appeal appeared to prejudice the maintenance of the patent as granted.
- IV. Both parties filed further written submissions, the appellant on 21 December 2021 in response to the Board's communication and the patent proprietor (respondent) on 10 February 2022 in response to the appellant's submissions.
- V. Oral proceedings before the Board took place on 21 February 2022 at the end of which the decision was announced. Reference is made to the minutes for further details of the oral proceedings.

VI. The final requests of the parties are as follows:

for the appellant

- that the decision under appeal be set aside and
- that the patent be revoked in its entirety;

for the respondent

- that the appeal be dismissed, *i.e.* that the patent be maintained as granted; or
- if the decision is set aside, that the patent be maintained in amended form according to one of the sets of claims filed as auxiliary requests 1 to 12 with the reply to the statement of grounds of appeal, the auxiliary requests having been filed originally on 21 September 2017 during opposition proceedings.

VII. The following documents are referred to in this decision:

- D1: GB 2 465 083 A;
- D2: GB 2 194 508 A;
- D3: US 2010/181341 A1;
- D4: WO 2007/146452 A2.

VIII. The lines of argument of the parties, where relevant for this decision, are addressed in detail in the reasons for the decision.

IX. Claim 1 of the patent as granted reads as follows (feature analysis as used in the statement of grounds of appeal):

- (A) A multi-tower modular dispensing system (10) comprising:
- (B) at least a first dispensing head (12) and a

- (C) second dispensing head (912) at a counter (14),  
a transfer unit (16, 600) located remotely from the counter (14),
- (D) piping (18) extending from the transfer unit (16) to the counter (14),
- (E) the transfer unit (16) comprising a centralized ingredient system (20) having a plurality of beverage ingredient sources (22),
- (F) the centralized ingredient system (20) configured to supply beverage ingredients to the piping (18) for the dispensing of a first beverage at the counter (14),
- (G) the piping comprising a main micro bundle (18),
- (H) the main micro bundle comprising at least two separate beverage ingredient lines,

characterised in that the multi-tower modular dispensing system (10) comprises

- (I) at least one doser unit (400) corresponding to at least the first dispensing head (12), the doser unit (400) configured to receive a beverage ingredient from the transfer unit (16) and dose a predetermined amount of the beverage ingredient to the first dispensing head (12),
- (J) a micro tower bundle (406) wherein the doser unit (400) supplies an appropriate amount of each beverage ingredient through said tower micro bundle (406),
- (K) the tower micro bundle (406) comprising a plurality of separate lines, with each line corresponding to a particular beverage ingredient.

- X. Since the present decision is taken on the basis of the main request, there is no need to reproduce the auxiliary requests here.

## **Reasons for the Decision**

1. *Main request - novelty, Articles 100(a) and 54 EPC*

- 1.1 Document D1

In the decision under appeal, the opposition division found that the subject-matter of claim 1 as granted was novel with respect to the disclosure of D1 as the dispensing system of document D1 did not disclose a multi-tower system nor did the transfer unit comprise a centralized ingredient system (see decision under appeal, III.12.2.1).

- 1.1.1 In its statement of grounds of appeal, the appellant argued that the opposition division's reasoning was incorrect and that all features of claim 1 as granted were disclosed in document D1.

The respondent argued in its reply to the statement of grounds of appeal that features A, B, C, E, F, J and K were not disclosed in document D1.

- 1.1.2 The Board finds that features A and B of claim 1 are disclosed in document D1 but not features C, E, F, J and K.

The Board notes that it is a prerequisite for lack of novelty that the claimed subject-matter is directly and

unambiguously derivable from the prior art (Case Law of the Boards of Appeal (CLB), 9th edition, 2019, I.C.4.1).

### 1.1.3 Features C, E and F

The Board sees no disclosure in document D1 of a "transfer unit located remotely from the counter ... comprising a centralized ingredient system having a plurality of beverage ingredient sources, the centralized ingredient system configured to supply beverage ingredients to the piping for the dispensing of a first beverage at the counter".

The appellant argued during oral proceedings before the Board that features C, E and F are disclosed in figure 1 of document D1. In this figure the beverage ingredient sources (46,48) are shown together with other items, such as a CO<sub>2</sub> supply, a carbonator (40) and prechillers (42,44). The skilled person is aware that these are bulky items which cannot be stored at the counter and therefore must be located remotely from the counter.

The appellant also brought forward the argument that as the tubing 116 in figures 8 and 9 is shown as being "cut-off", that the tubing implicitly extends to remotely stored ingredients. With its statement of grounds of appeal (point 6.10), the appellant made a further argument that figure 11 of document D1 showed long tubing and the cupboard in the figure was provided with a hole through which tubing and power cables could be fed.

The Board however agrees with the respondent that document D1 does not disclose any location for the



ingredient sources. Figure 1 of document D1 is a schematic representation of a system with no indication of where components of the system are to be found, either in relation to each other or to a counter. No ingredient sources are shown in any of figures 8, 9 and 11, the skilled person therefore cannot unambiguously derive their location from these figures.

#### 1.1.4 Features J and K

The appellant argued that tubes 146 shown in figure 10 of document D1 form a tower micro bundle according to features J and K.

The Board however follows the arguments of the respondent that document D1 does not disclose a tower micro bundle (reply to the statement of grounds of appeal, paragraph 139). The output tubes 146 in figure 10, through which the doser unit supplies an appropriate amount of beverage ingredient to the dispensing head, are single, separate tubes which do not form a bundle. The appellant argued that as the tubes 146 in figure 10 are fixed to the dispenser housing, they form a bundle. This argument is not persuasive as the tubes are not held together, but are individually secured to a housing.

1.1.5 The subject-matter of claim 1 of the patent as granted is therefore novel with respect to the disclosure of document D1.

#### 1.2 Document D2

In the decision under appeal, the opposition division found that the subject-matter of claim 1 as granted was novel with respect to the disclosure of document D2 as

the dispensing system of document D2 did not disclose a multi-tower modular system nor a doser unit configured to dose a predetermined amount (see decision under appeal, III.12.2.2).

- 1.2.1 In its statement of grounds of appeal the appellant argued that the opposition division's reasoning was incorrect as all features of claim 1 as granted are disclosed in document D2.

The respondent, in its reply to the statement of grounds of appeal, argued that features A, B, C, E, I, J and K were not disclosed in document D2.

- 1.2.2 The Board finds that document D2 does not show at least features A, I, J and K.

(a) Feature A

The Board agrees with the opposition division's finding that document D2 does not unambiguously disclose a plurality of towers. The appellant's arguments that the skilled person would understand each schematic box as representing a tower are not persuasive. It cannot be determined from the schematic drawings of figures 1 or 2 whether the three boxes shown as "dispense apparatus" 20 have any particular structure. Therefore there is no disclosure of a multi-tower system in document D2.

(b) Features I, J and K

The Board also agrees with the respondent that document D2 does not show features I, J and K.

The opposition division found that a doser unit was implicitly present in document D2 (page 2, lines 63 to

72) as the concentrate is supplied in an "appropriate measure" (decision under appeal, page 7, (I)). The appellant also argued that the term "appropriate measure" was the same as "a predetermined amount" as found in feature I.

The Board, however, agrees with the respondent that the cited passage of D2 does not unambiguously disclose a doser unit, configured to receive a beverage ingredient from the transfer unit and dose a predetermined amount of the beverage ingredient to a dispensing head through a tower micro bundle (see reply to the statement of grounds of appeal, point 1.2.5).

The cited passage of D2 is understood by the skilled person as disclosing that when a dispense tap is opened (by a user) and carbonated water is dispensed, concentrate is also dispensed. Whether this amount is predetermined and if so, by which component of the system, is not disclosed.

The opposition division also found that the lagged bundle of pipes referred to on page 2, lines 6 to 15, of D2 formed both the main micro bundle and the tower micro bundle (see decision under appeal, page 7, (H) and (K)). The Board however finds that the lagged pipes running between the cooler and the dispense apparatus cannot be seen as a tower micro bundle as there is no indication of a doser unit, which receives a beverage ingredient from a transfer unit and then supplies a beverage ingredient to the dispensing head through this bundle.

- 1.2.3 The subject-matter of claim 1 of the patent as granted is therefore novel with respect to the disclosure of document D2.

1.3 The Board is therefore not convinced by the arguments of the appellant that the opposition division was incorrect in finding in the decision under appeal that neither document D1 nor document D2 disclosed multi-tower modular dispensing systems with all features of claim 1 as granted.

2. *Main request - inventive step, Articles 100(a) and 56 EPC*

The opposition division found in the decision under appeal, point III.12.3, that the subject-matter of claim 1 as granted was inventive.

The appellant argued that the decision under appeal was incorrect as the subject-matter of claim 1 was obvious with respect to any of the following prior art combinations:

- document D1 alone or in combination with the common general knowledge of the skilled person;
- document D2 alone;
- the combination of the teaching of documents D2 and D1; or
- the combination of the teaching of documents D3 and D1 or D4.

2.1 Document D1 alone or in combination with common general knowledge

2.1.1 The appellant considered the embodiment shown in figures 1 and 8 to 10 as being a promising starting point for the consideration of inventive step, whereby paragraph [0034] of document D1 disclosed that figures 1 and 8 to 10 formed a single embodiment.

The appellant used a partial problem approach to inventive step, with a first group of distinguishing features C, E and F and a second group of distinguishing features J and K.

The first partial problem to be solved by features C, E and F was regarded by the appellant either as "how to provide the ingredient sources for the dispenser" (submissions of 21 December 2021, point 7.3); or where to provide the ingredient sources or where to locate the transfer unit (argued during oral proceedings).

The second partial problem to be solved was regarded by the appellant as either not existing, due to a lack of any technical effect, or as "how to provide the separate beverage ingredients to the dispensing head" or "how to tidy up the means for supplying the separate beverage ingredients to the dispensing head" (submissions of 21 December 2021, points 7.2, 7.8 and 7.12).

2.1.2 The Board finds that at least features J and K render the subject-matter of claim 1 inventive with respect to the disclosure of document D1. Therefore it is not necessary to consider whether the appellant's partial problem approach is valid for the claimed subject-matter nor whether the first partial problem is solved in an obvious manner for the skilled person.

2.1.3 The appellant argued that features J and K have either

- (i) no technical effect, or
- (ii) are obvious when considering the disclosure of D1 on its own or together with the skilled person's common general knowledge.

2.1.4 (i) no technical effect

The Board cannot agree that features J and K have no technical effect. The supply of beverage ingredients from a doser unit to a dispensing head through a plurality of separate lines which form a tower micro bundle in the claimed dispensing system has at least the effect of transporting ingredients using a compact, "tidy" arrangement.

2.1.5 (ii) features are obvious

The appellant argued that as document D1, figure 8, shows input tubing 116 in the form of a bundle, the skilled person would find it obvious to also provide the output tubes 146 in figure 10 in the form of a bundle. Alternatively, the use of a cable tie to tidy up cables forms part of the skilled person's general knowledge. Therefore it would be obvious for the skilled person to provide tubes 146 with some form of tie.

It is however established case law of the Boards of Appeal that when assessing inventive step it must be shown not only that the skilled person could have modified the prior art to arrive at the claimed invention but also that they would have done so (CLB, *supra*, I.D.5.).

As argued by the respondent during oral proceedings before the Board, the appellant did not show why the skilled person would be motivated to make such changes to the beverage dispenser of document D1.

In particular, the appellant has not convincingly shown that the skilled person would have formed tubes 146 into a bundle. As the appellant itself points out in point 7.10 of its submissions of 21 December 2021, the

pipes 146 extending between the solenoid block and nozzle block of document D1 are of a short length such that any binding and wrapping the pipes together to form a bundle would be unnecessary. There does not therefore appear to be any motivation for the skilled person to adapt the dispensing system of D1 in this way, in the absence of any knowledge of the claimed invention.

2.1.6 For at least this reason, the subject-matter of claim 1 as granted is inventive over document D1, either alone or in combination with the common general knowledge of the skilled person.

2.2 Document D2 alone

The appellant argued that the subject-matter of claim 1 is not inventive over document D2 alone. The appellant considered the embodiment of document D2 illustrated in figure 2 as a suitable starting point and used a partial problem approach, where the first problem was regarded as how to implement the dispensing system schematically illustrated in document D2, and the second problem was regarded as how to supply the dispensing head with beverage ingredients in a tidy manner.

According to the appellant, it would be obvious for the skilled person to use either continuous or batch pour dispensers in the system of document D2 as both types are commonly known. In addition as there must be means for providing ingredients to the dispensing heads, it would be obvious for the skilled person to provide a tower micro bundle.

The Board does not find these arguments convincing.

As mentioned above in point 2.1.5, it is established case law that in order to demonstrate that claimed subject-matter is obvious, a party must convincingly show not only that the skilled person could have arrived at the claimed invention, but that they would have done so. When making this assessment it is important not to use hindsight, *i.e.* the skilled person must be considered as viewing the prior art without any knowledge at all of the invention (see CLB, *supra*, I.D.6.).

It follows from this that the skilled person needs motivation to modify the prior art in such a way that it would fall within the scope of the claim. It is not sufficient to show that all elements of a claim may have been known to the skilled person, but rather why the skilled person would have combined them in that particular way.

2.2.1 The appellant has failed to show why the skilled person would have modified the system of D2 to include, in particular, the features I, J and K. The subject-matter of claim 1 of the patent as granted is therefore not obvious with respect to the disclosure of document D2.

2.3 Combination of the teaching of documents D2 and D1

2.3.1 In its statement of grounds of appeal, the appellant argued that when the skilled person is attempting to implement the schematic system of document D2 (figures 1 or 2), they would use the tower dispenser of document D1 as the dispense apparatus 20 of document D2. As the dispenser of document D1 comprises features I, J and K, the subject-matter of claim 1 would be obvious when compared with the system formed by a combination of



documents D2 and D1 (see statement of grounds of appeal, 8.26 to 8.28).

The appellant further argued that features J and K were in any case rendered obvious by document D1 and the skilled person's common general knowledge (submissions 21 December 2021, point 9.2).

2.3.2 As set out above in point 1.1.4, the Board finds that there is no disclosure of features J and K in document D1 and, even taking account of common general knowledge, these features are not rendered obvious by document D1 (see point 2.1.5 above).

2.3.3 As document D1 does not disclose or make obvious features J and K, the combination of the teachings of document D2 and D1 does not render claim 1 of the patent as granted obvious.

2.4 Document D3 as a suitable starting point

The opposition division found that document D3 disclosed all features of the subject-matter of claim 1 with the exception of a doser unit according to feature I (see decision under appeal, III.12.3.13).

2.4.1 The appellant argued that a doser unit was implicitly disclosed in document D3 in order to receive syrups and water and dispense them (as indicated in paragraphs [0043] and [0090] of document D3).

2.4.2 The Board however finds that document D3 does not disclose feature I, nor does it disclose features G, H, J or K, for the following reasons.

(a) features G and H

The Board agrees with the respondent that there is no unambiguous disclosure of features G and H in document D3. The embodiment described in figure 8 and in paragraphs [0098] and [0099] mentions only that the system has "different types of dispensing towers" and "may be used to provide different beverages in different locations" but does not unambiguously show that the piping comprises a bundle having at least two separate beverage lines extending from the transfer unit to the counter. Figure 8 is a schematic representation of a system and it cannot be directly and unambiguously derived that the "supply lines 704" form a bundle.

(b) features I, J and K

The Board further agrees with the respondent that the features I, J and K are not disclosed in document D3. The skilled person cannot directly derive the existence of a doser unit and tower micro bundle, nor that the doser unit supplies a beverage ingredient through the tower micro bundle from figure 8. The schematic "supply lines 704" shown in the figure can only be understood by the skilled person as being lines which "connect the towers to a number of different beverage supplies 706a, 706b, 706c" (see document D3, paragraph [0099]). No further information is disclosed to the skilled person.

## 2.5 Combination of the teaching of documents D3 and D1

The opposition division found that the combination of teaching of documents D3 and D1 would not lead to the subject-matter of claim 1 of the patent as granted because the skilled person would have difficulties combining the dispenser of document D1 with the system

of document D3 (see paragraph bridging pages 12 and 13 of the decision under appeal).

2.5.1 The appellant argued that the opposition division was incorrect in its finding. According to the appellant the dispenser of D1 would be used in place of one of the dispensers shown in figure 8 of document D3. Therefore it would not be necessary to adapt the system of D3 in any way.

2.5.2 The Board however agrees with the respondent that the skilled person would have no motivation to replace the dispenser in the system of document D3 with a dispenser disclosed in document D1. Document D3 teaches the provision of dispensers with taps within cold blocks. To replace such integrated taps with a completely different dispenser (such as disclosed in document D1) would go against the central teaching of document D3.

2.5.3 The Board also notes that the dispenser of D1 does not disclose, nor make obvious, features J and K as detailed above in points 1.1.4 and 2.1.5. Therefore, irrespective of whether the skilled person could or would replace a dispensing head in the system shown in figure 8 of D3 with the dispenser known from D1, the subject-matter of claim 1 is inventive over a combination of documents D3 and D1, taking into account the skilled person's common general knowledge.

2.6 Combination of the teaching of documents D3 and D4

In the decision under appeal the opposition division found that the subject-matter of claim 1 as granted was inventive compared with a combination of the teaching of documents D3 and D4.

In particular, the opposition division found that a combination of the teaching of documents D3 and D4 would be difficult to achieve as document D3 disclosed tap dispensers with beverage flow being controlled by actuating a lever, whereas in the dispenser of document D4 the beverage flow is controlled by pressing a button (see decision under appeal, III.12.3.15).

2.6.1 The appellant argued that the decision under appeal was incorrect as a combination of different components of the dispensers of documents D3 and D4 was not required. The skilled person, starting from the dispensing system of figure 8 in document D3, would use the dispenser of document D1 in place of a dispenser of the system of D3 (figure 8).

2.6.2 As detailed above in point 2.5.2, the Board finds that to replace the dispensers of figure 8 with dispensers other than those disclosed in document D3 would be to go against the central teaching of the document.

Further, a combination of documents D3 and D4 would not lead to the subject-matter of claim 1 as granted as the Board finds that document D4 does not disclose, *inter alia*, features J and K.

2.6.3 The appellant argued that the passage of document D4 on page 15, lines 22 to 23, and figure 1 show a tower micro bundle comprising a plurality of separate lines. However, figure 1 of document D4 shows a highly schematic diagram of the apparatus from which no "bundle" can be ascertained. The passage on page 15, lines 22 to 23, reads, "[T]he dispensing nozzle 20 preferably may be a multi-flavor dispensing valve capable of mixing a number of fluids at the same time".

This cannot be seen as disclosure of a tower micro bundle.

- 2.6.4 The appellant argued further that even if features J and K were not disclosed in the dispenser of document D4, that the provision of a tower micro bundle either provides no technical effect or is an obvious option for the skilled person when provided with a collection of pipes (see submissions of 21 December 2021, points 11.6 to 11.8).

For the same reasons as given in relation to features J and K for document D1 (see points 2.1.4 and 2.1.5 above), the Board finds the appellant's arguments unconvincing. In addition the appellant has not shown why, without knowledge of the invention, the skilled person would combine the teachings of documents D3, D4 and the common general knowledge of the skilled person.

### 3. Conclusions

In summary, in reviewing the decision under appeal, the Board finds that the appellant has not convincingly shown that the findings of the opposition division were incorrect, the appeal is therefore to be dismissed.

**Order**

**For these reasons it is decided that:**

**The appeal is dismissed.**

The Registrar:

The Chairman:



G. Nachtigall

I. Beckedorf

Decision electronically authenticated