

PATENT COOPERATION TREATY

From the:
INTERNATIONAL SEARCHING AUTHORITY

To:

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PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43*bis*.1)

Date of mailing (*day/month/year*)
14 December 2016

Applicant's or agent's file reference
SBUX1.388WO

FOR FURTHER ACTION

See paragraph 2 below

International application No.

PCT/US2016/051345

International filing date (*day/month/year*)

12 September 2016

Priority date (*day/month/year*)

18 September 2015

International Patent Classification (IPC) or both national classification and IPC

A47J 31/44 (2006.01)

Applicant

STARBUCKS CORPORATION

1. This opinion contains indications relating to the following items:

- | | | |
|-------------------------------------|--------------|--|
| ☒ | Box No. I | Basis of the opinion |
| ☐ | Box No. II | Priority |
| ☐ | Box No. III | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
| ☒ | Box No. IV | Lack of unity of invention |
| ☒ | Box No. V | Reasoned statement under Rule 43 <i>bis</i> .1(a)(i) with regard to novelty, inventive step and industrial applicability; citations and explanations supporting such statement |
| ☐ | Box No. VI | Certain documents cited |
| ☐ | Box No. VII | Certain defects in the international application |
| ☐ | Box No. VIII | Certain observations on the international application |

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1*bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

Name and mailing address of the ISA

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PO BOX 200, WODEN ACT 2606,
AUSTRALIA
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Date of completion of this opinion

14 December 2016

Authorised Officer

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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

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Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of:
 - ☒ The international application in the language in which it was filed
 - ☐ A translation of the international application into, , which is the language of a translation furnished for the purposes of international search (under Rules 12.3(a) and 23.1(b)).
2. ☐ This opinion has been established taking into account **the rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43*bis*.1(a))
3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of a sequence listing filed or furnished:
 - a. (means)
 - ☐ on paper
 - ☐ in electronic form
 - b. (time)
 - ☐ in the international application as filed
 - ☐ together with the international application in electronic form
 - ☐ subsequently to this Authority for the purposes of search
4. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
5. Additional comments:

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Box No. IV Lack of unity of invention

1. ☒ In response to the invitation (Form PCT/ISA/206) to pay additional fees the applicant has, within the applicable time limit:
- ☐ paid additional fees
- ☐ paid additional fees under protest and, where applicable, the protest fee
- ☐ paid additional fees under protest but the applicable protest fee was not paid
- ☒ not paid additional fees
2. ☐ This Authority found that the requirement of unity of invention is not complied with and chose not to invite the applicant to pay additional fees.
3. This Authority considers that the requirement of unity of invention in accordance with Rule 13.1, 13.2 and 13.3 is
- ☐ complied with
- ☒ not complied with for the following reasons:

See Supplemental Box for Details

4. Consequently, this opinion has been established in respect of the following parts of the international application:
- ☐ all parts
- ☒ the parts relating to claims Nos. **1-25**

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY		International Application No. PCT/US2016/051345									
Box No. V	Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement										
1. Statement <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%; vertical-align: top;"> Novelty (N) </td> <td style="width: 50%; vertical-align: top;"> Claims 1-12, 14-25 Claims 13 </td> <td style="width: 20%; text-align: center; vertical-align: top;"> YES NO </td> </tr> <tr> <td style="vertical-align: top;"> Inventive step (IS) </td> <td style="vertical-align: top;"> Claims NONE Claims 1-25 </td> <td style="text-align: center; vertical-align: top;"> YES NO </td> </tr> <tr> <td style="vertical-align: top;"> Industrial applicability (IA) </td> <td style="vertical-align: top;"> Claims 1-25 Claims NONE </td> <td style="text-align: center; vertical-align: top;"> YES NO </td> </tr> </table>			Novelty (N)	Claims 1-12, 14-25 Claims 13	YES NO	Inventive step (IS)	Claims NONE Claims 1-25	YES NO	Industrial applicability (IA)	Claims 1-25 Claims NONE	YES NO
Novelty (N)	Claims 1-12, 14-25 Claims 13	YES NO									
Inventive step (IS)	Claims NONE Claims 1-25	YES NO									
Industrial applicability (IA)	Claims 1-25 Claims NONE	YES NO									
2. CITATIONS AND EXPLANATIONS: <u>CITATIONS</u> D1: EP 2353473 A1 (NESTEC S.A.) 10 August 2011 D2: US 2008/223478 A1 (HANTSOO et al.) 18 September 2008 D3: US 8777182 B2 (SPRINGER) 15 July 2014 D4: US 2012/156337 A1 (STUDOR et al.) 21 June 2012 <u>NOVELTY (N)</u> <u>Claim 13</u> is not novel in light of D1 and therefore does not comply with PCT Article 33(2). D1 discloses: A dispensing assembly configured to receive a flow of beverage from a beverage preparation machine (item 1 in Figs 1-5), the dispensing assembly comprising: • a base (see housing, 5, in Figs 1-5); • a rotation assembly (see top end of duct 10 in close vicinity to pivot axis 11) pivotably coupled to the base and configured to pivot about a pivot axis (11); • a dispensing unit (see duct 10) comprising a first end (15) and a second end, the second end (see 10) coupled with the rotation assembly, the dispensing unit configured to pivot about the pivot axis between a first position (see Fig 1) and a second position (see Fig 3); the dispensing unit configured such that: in the first position, the dispensing unit is adapted to receive the beverage through the second end (see para 0023); during rotation from the first position to the second position, the dispensing unit discharges the beverage through the first end (See paras 0029-0030 which disclose an intermediate position of the duct, 10, also shown in Fig 2, and explain that beverage can be dispensed in this intermediate position). in the second position, the dispensing unit is adapted to receive cleansing fluid through the second end and to discharge the cleansing fluid through the first end (see para 0025). <u>Claim 1</u> is novel and therefore complies with PCT Article 33(2). D1 is considered to represent the closest prior art. D1 discloses a beverage preparation machine (item 1 in Figs 1-5) configured to prepare a beverage; a dispensing assembly (item 1 in Figs 1-5) comprising:											

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a base (see housing, 5, in Figs 1-5); a dispensing unit rotatably coupled to the base (see duct 10),

the dispensing unit comprising:

a hollow elongate shell (duct, 10, is inherently, hollow) with an open first end (outlet, 15) and a closed second end (see top end of duct 10 in close vicinity to pivot axis 11), and a control valve arrangement that can switch between states (see item 400 in Figs 6-9) whereby steam, milk or water can be selectively introduced (see para 0063-0069).

The dispensing unit can receive a portion a beverage through the second end in a first position (see Fig 1 and para 0023), can receive cleansing fluid through the second end in a second position (see Fig 3 and para 0025) and can dispense beverage in an intermediate position between the first and second positions (see Fig 2 and paras 0029-0030).

However, D1 does not disclose an upright position wherein the first end of the dispensing unit is substantially directly above the second end, and wherein a portion of a beverage can be received in the dispensing unit through the second end before rotating the dispensing unit to discharge the beverage through the first end. D1 also does not disclose a check valve located at the second end of the dispensing unit. Claim 1 is therefore novel and complies with PCT Article 33(2).

Appended claims 2-12 add further features to those defined in claim 1 and are therefore also novel.

Appended claims 14-19 are novel and therefore comply with PCT Article 33(2). Whilst D1 discloses the features of independent claim 13, D1 does not disclose the added features of these appended claims.

Claim 20 is novel and therefore complies with PCT Article 33(2).

Appended claims 21-25 add further features to those defined in claim 20 and are therefore also novel.

INVENTIVE STEP (IS)

Claim 1 does not involve an inventive step in light of D1 and common general knowledge and hence does not comply with PCT Article 33(3).

As per the above statement on novelty, D1 does not disclose an upright position wherein the first end of the dispensing unit is substantially directly above the second/open end, and wherein a portion of a beverage can be received in the dispensing unit through the second end before rotating the dispensing unit to discharge the beverage through the first end. D1 also does not disclose the feature of a check valve at the second end of the dispensing unit.

This feature, however, is common general knowledge in the art of beverage dispensing. See, for example, D2, which discloses the filling of a dispensing unit (item 61 in Fig 6) from the bottom up and the discharging of beverage through the open end (see reference to pouring in para 0098). Also see D3, which discloses the filling of a dispensing unit (item 100 in Fig 1) from the bottom up (Col 6, lines 59-61) and the discharging of beverage through the open end (see reference to pouring in Col 8, lines 20-22).

I also consider the feature of a check valve at the second end of the dispensing unit to constitute no more than common general knowledge in the art. See, for example, D2, paragraphs 0095-0096 and item 69 in Fig 6, and D3, Col 1, lines 54-57.

Furthermore, appended claims 2-12 do not involve an inventive step and hence do not comply with PCT Article 33(3).

Regarding claim 2, D1 discloses a pivot axis that is substantially horizontal. See para 0032, which says “pivoting axis 11 of duct 10 is generally perpendicular to front wall 6” in reference to Figs 1-3.

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Regarding claim 3, a disconnectable dispensing unit is common general knowledge in the art. See, for example, D2, Fig 7, and D3, Col 1, lines 51-57.

Regarding claims 4 and 5, I consider the addition of a second dispensing unit and a selector valve configured to switch between allowing the beverage to flow to the first dispensing unit and allowing the beverage to flow to the second dispensing unit to be a design choices.

Regarding claims 6-8, I consider the open and closed states of a check valve depending on fluid flow or dispensing unit position, the type of check valve and the use of a spring or gravity to seat a ball against a tapered wall in a check valve to be design choices.

Regarding claim 9, D1 discloses a pump configured to encourage the beverage to flow from the beverage preparation machine to the dispensing unit (see item 350 in Figs 6-9, also see para 0061).

Regarding claim 10, D1 discloses an electronic control unit (see para 0042). Using an electronic control unit to control valve operations is a design choice.

Regarding claims 11-12, D1 discloses a machine that can be mounted on a table-top (see para 0040). Hence, the assembly of D1 is configured to mount on a countertop. Countertops inherently have customer sides and server sides and are inherently visible from each side. I consider the placement of the beverage preparation machine below the countertop to be a design choice.

Given the above novelty objection, claim 13 does not involve an inventive step and hence does not comply with PCT Article 33(3).

Furthermore, claims 14-19 do not involve an inventive step in light of D1 and therefore do not comply with PCT Article 33(3).

Regarding claim 14, having a dispensing unit in an upright position in which a longitudinal axis of the dispensing unit is generally parallel with vertical before dispensing the beverage is well known in the art. See, for example, D2, Figs 6-7, and D3, Fig 1 and Col 6, lines 59-61.

Regarding claim 15, D1 discloses a valve (See valve, 400, at the end of conduit 20, in Fig 6. See also para 0083). Whilst the valve is not located at the second end of the dispensing unit, I consider the location of the check valve to be a design choice.

Regarding claim 16, the range of angles of rotation is a design choice.

Regarding claim 17, D1 discloses a base configured to be mounted on a countertop (see para 0040 which states that the machine can be a table-top machine). I consider the feature of the base being spaced apart from the beverage preparation machine to be a design choice.

Regarding claims 18-19, I consider the feature of a second dispensing unit coupled with the rotation assembly and configured to pivot about the pivot axis, and the feature of the first and second dispensing units being configured to pivot independently of each other, to be design choices.

Claim 20 does not involve an inventive step in light of D2 and hence does not comply with PCT Article 33(3). D2 discloses:

A method of dispensing a beverage (para 0098) from a dispensing unit (see beverage container, 61, in Fig 6) comprising a first end (top of 61) and a second end (bottom of 61), the dispensing unit configured to rotate between a substantially upright position and a substantially inverted position (this is inherently disclosed because the container can be removed – see Fig 7 and para 0030, and hence can be rotated to any position desired by the user), a longitudinal axis of the dispensing unit being generally parallel with vertical and the first end being higher than the second end in the upright

position (see Fig 6), the longitudinal axis of the dispensing unit being generally parallel with vertical and the second end being higher than the first end in the inverted position (if the container is rotated to an inverted position then the second end will inherently be higher than the first end), the method comprising:

preparing the beverage with a beverage preparation machine (a beverage preparation machine is implied by references to a pressurised reservoir in the abstract and para 0094);

introducing the beverage through the second end of the dispensing unit when the dispensing unit is in the upright position (see Fig 6);

rotating the dispensing unit to an intermediate position between the upright position and the inverted position and pouring the beverage out of the first end of the dispensing unit when the dispensing unit is in the intermediate position (see para 0098 which states that the container can be poured from, which is also inherent disclosure of an intermediate position);

The difference between claim 20 and the disclosure of D2 is that claim 20 defines the steps of:

receiving the beverage in a vessel; rotating the dispensing unit to the inverted position; draining residual beverage from the dispensing unit; and rotating the dispensing unit to the upright position.

Whilst these steps are not disclosed in D2, they are not inventive. The step of receiving the beverage in a vessel is an obvious selection after the step of pouring the beverage out of the container (pouring is disclosed in para 0098). The step of rotating the dispensing unit to the inverted position and draining residual beverage from the dispensing unit is not inventive because this action is performed when a beverage container is held upside-down over a basin to empty waste beverage or placed upside-down in a sink or on a grate to drain, common actions a person skilled in the art would be very familiar with. Furthermore, it would be obvious to a person skilled in the art to rotate the dispensing unit to the upright position once the emptying/draining is completed.

Using the same reasoning, claim 20 does not involve an inventive step in light of D3. See Col 6, lines 59-61 and Fig 1 for the feature of a dispensing unit filling from the bottom up. See Col 1, lines 51-57 for the feature of the dispensing unit being disconnectable. See also Col 8, lines 20-22 which disclose the action of pouring.

Furthermore, appended claims 21-25 do not involve an inventive step and hence do not comply with PCT Article 33(3).

Regarding claims 21 and 25, I consider the direction and level of continuity of rotation of the container to be a design choice.

Regarding claims 22-23, the feature of introducing cleaning fluid to a dispensing unit is common general knowledge in the art. See, for example, D1, para 0025 and Fig 3. I consider the feature of distributing the cleaning fluid substantially equally around an inside circumference of the dispensing unit to be a design choice.

Regarding claim 24, rotatably coupling a dispensing unit with a base to perform the rotational movements defined in claim 20 is considered to be a technical equivalent to performing the rotational movements with one's hand.

INDUSTRIAL APPLICABILITY (IA)

The invention defined in the claims is considered to meet the requirements of Industrial Applicability under Article 33(4) of the PCT because it can be made by, or used in, industry.

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY Supplemental Box	International Application No. PCT/US2016/051345
Continuation of: Box IV This International Application does not comply with the requirements of unity of invention because it does not relate to one invention or to a group of inventions so linked as to form a single general inventive concept. This Authority has found that there are different inventions based on the following features that separate the claims into distinct groups: • Claims 1-25 are directed to a dispensing unit. The features of fluid flow being dependant on a rotational position of the dispensing unit and the means to fill the dispensing unit with fluid from a port in the bottom of the dispensing unit, are specific to this group of claims. • Claims 26-48 and claim 54 are directed to a container. The features of fluid flow being dependent on a state of engagement between the container and a base, and the means to fill the container with fluid from a port in the bottom of the container, are specific to this group of claims. • Claims 49-53 are directed to a method of producing a heated and aerated liquid. The features of aerating a liquid and the means to fill the container with fluid from a port in the bottom of the container, are specific to this group of claims. PCT Rule 13.2, first sentence, states that unity of invention is only fulfilled when there is a technical relationship among the claimed inventions involving one or more of the same or corresponding special technical features. PCT Rule 13.2, second sentence, defines a special technical feature as a feature which makes a contribution over the prior art. When there is no special technical feature common to all the claimed inventions there is no unity of invention. In the above groups of claims, the identified features may have the potential to make a contribution over the prior art but are not common to all the claimed inventions and therefore cannot provide the required technical relationship. The only feature common to all of the claimed inventions and which provides a technical relationship among them is the means to fill the dispensing unit or container with fluid from a port in the bottom of the dispensing unit or container. However this feature does not make a contribution over the prior art because it is disclosed in: US 2008/0223478 A1 (HANTSOO et al.) 18 September 2008 Therefore in the light of this document this common feature cannot be a special technical feature. Therefore there is no special technical feature common to all the claimed inventions and the requirements for unity of invention are consequently not satisfied <i>a posteriori</i>. Because no additional search fees were paid, the International Search Report and the Written Opinion of the International Searching Authority was restricted to the invention claimed in claims 1 to 25. Consequently, the International Preliminary Examination must be likewise restricted, without the need to issue an invitation to so restrict it.	