REMARKS

This Response is submitted in reply to the Non-final Office Action dated June 6, 2016. The Director is authorized to charge any fee that may be required or to credit any overpayment to Deposit Account No. 02-1818. If such a withdrawal is made, please indicate the Attorney Docket No. 3712036-02148 on the account statement.

Claims 1-16 are currently pending. In the Office Action, the drawings are objected to; Claims 5 and 16 are objected to; and Claims 1-16 are rejected under 35 U.S.C. §112 and 35 U.S.C. §103. In response, Applicant has amended the specification and Claims 1-2, 4-6, 8-11, 13 and 16, canceled Claim 7 without prejudice or disclaimer, and also added newly submitted Claims 17-19. The amendments do not add new matter. The amendments to Claims 2, 4-6, 8-11 and 13 are solely for clarification purposes, not to avoid any prior art. The amendments to Claims 1 and 16 are fully supported in the specification at, for example, paragraphs [0015], [0023] and [0052]. The newly submitted claims do not add new matter and are fully supported in the specification at, for example, paragraphs [0096]-[0098] and Fig. 6. In view of the amendments and/or for at least the reasons set forth below, Applicant respectfully requests that the objections and the rejections be reconsidered and withdrawn.

In the Office Action, the drawings are objected to for alleged informalities. Specifically, the Patent Office objects to the reference characters 37 and 38 used in paragraph [00106] of the specification. See Office Action, page 2. In response, without acquiescing to the merits of the objection and solely to advance prosecution of this application, Applicant has amended the specification to disclose "[t]he capsule of FIG. 14 differs from any other embodiment in, at least, that the upper wall 3 closing on the body of the capsule is formed of at least two layers 41,68 ~~37,38~~."

Further, the Patent Office alleges that the outer perforable, liquid-impervious layer 41 and the inner liquid porous layer 68 are not shown in the drawings. See Office Action, page 2. Applicant respectfully disagrees and notes that Fig. 14 clearly shows these components.

Accordingly, Applicant respectfully requests that the objections to the drawings be reconsidered and withdrawn.

In the Office Action, Claims 5 and 16 are objected to for alleged informalities. See Office Action, page 3. In response, without acquiescing to the merits of the objections and

K-FEE SYSTEM GMBH, EX2003, page 1
NESPRESSO USA, INC. v. K-FEE SYSTEM GMBH
IPR2024-00299, U.S. PATENT 11,554,910

solely to advance prosecution of this application, Applicant has amended the present claims to remove any alleged informalities.

Accordingly, Applicant respectfully requests that the objections to the present claims be reconsidered and withdrawn.

In the Office Action, Claims 1-16 are rejected under 35 U.S.C. §112, second paragraph, as allegedly indefinite. See Office Action, page 4. In response, without acquiescing to the merits of the objection and solely to advance prosecution of this application, Applicant has amended the present claims to recite "rim" instead of "flange-like rim."

Accordingly, Applicant respectfully submits that the present claims fully comply with 35 U.S.C. §112, second paragraph, and respectfully requests that the indefiniteness rejections be reconsidered and withdrawn.

In the Office Action, Claims 1-3, 5-10, 12, 13 and 16 are rejected under 35 U.S.C. §103(a) as unpatentable over U.S. Patent No. 4,775,048 to Baecchi et al. ("*Baecchi*") in view of International Patent App. Pub. No. WO 2009/148646 to Yoakim ("*Yoakim I*"). In view of the amendments and/or for at least the reasons set forth below, Applicant respectfully submits that the cited references are deficient with respect to the present claims.

Amended independent Claims 1 and 16 each recite, in part, a method comprising applying a resilient load from a resilient member onto the plate to engage the pressing surface portion with the force-setting portion, <u>the annular raising portion being rigid to resist compression by the pressing surface portion applying a closure force thereto</u>; and <u>forcing the valve to open by the pressing surface portion of the valve being pushed against the resilient member by the centrifuged liquid that is moving away from the annular raising portion for creating a flow restriction gap while the annular raising portion remaining of a relatively constant dimension to restrict the centrifuged liquid flowpath through the restriction gap</u>.

As detailed in the specification, preparing a beverage by separating a mixture consisting of brewed coffee and coffee powder with centrifugal forces is known. Such a mixture is obtained by bringing hot water and coffee powder together for a defined time. The water is then forced through a screen, on which screen powder material is present. Existing systems place the coffee powder in a receptacle which is usually a non-removable part of a machine. However, such devices have many disadvantages. See specification, paragraphs [0003]-[0004].

K-FEE SYSTEM GMBH, EX2003, page 2
NESPRESSO USA, INC. v. K-FEE SYSTEM GMBH
IPR2024-00299, U.S. PATENT 11,554,910

First, the coffee powder must be properly dosed manually in the receptacle. Second, the centrifuged coffee waste becomes dry and must be removed by scraping the surface of the receptacle. As a result, the coffee preparation requires a lot of manual handling and is so very time consuming. Usually coffee freshness can also vary a lot, and this can impact the cup quality because coffee comes generally from bulk package or coffee is ground from beans in the receptacle itself. Also, depending on the manual dosage of coffee and the brewing conditions (e.g., centrifugal speed, receptacle size), the cup quality can vary a lot. Therefore, these systems have never reached an important commercial success. See specification, paragraphs [0004]-[0006].

In contrast, the presently claimed capsule has an annular raising or force-setting portion, the beverage production device has a pressing surface, and these components form a restriction valve for the flow of beverage. The raising portion is more particularly configured to selectively block and/or restrict the flow path of the centrifuged liquid in order to delay its release from the capsule and regulate the flow when released. More particularly, when a sufficient pressure of the centrifuged liquid is reached at the valve means, i.e., the centrifuged liquid forcing against the raising portion, the valve means opens, i.e., a restricted flow gap is provided by the pressing surface of the device moving away from the raising portion of the capsule or vice versa. See specification, paragraph [0015].

Baecchi and *Yoakim I* alone or in combination fail to disclose or suggest every element of the present claims. Moreover, the skilled artisan would not have modified these references to arrive at the present claims.

For example, *Baecchi* and *Yoakim I* alone or in combination fail to disclose or suggest applying a resilient load from a resilient member onto the plate to engage the pressing surface portion with the force-setting portion, <u>the annular raising portion being rigid to resist compression by the pressing surface portion applying a closure force thereto</u>; and <u>forcing the valve to open by the pressing surface portion of the valve being pushed against the resilient member by the centrifuged liquid that is moving away from the annular raising portion for creating a flow restriction gap while the annular raising portion remaining of a relatively constant dimension to restrict the centrifuged liquid flowpath through the restriction gap</u> as required by the present claims.

K-FEE SYSTEM GMBH, EX2003, page 3
NESPRESSO USA, INC. v. K-FEE SYSTEM GMBH
IPR2024-00299, U.S. PATENT 11,554,910

On page 5 of the Office Action, the Patent Office alleges that the raised concentric elements 232 of the primary reference *Baecchi* are the recited annular raising portion which is engaged by a pressing surface portion of the valve located on the beverage production device.

However, in the claimed invention, the annular raising portion of the capsule is there to be a force-setting portion of the valve, but stays constant when the restriction gap is created, and the restriction gap for the centrifuged liquid is created by the pressing surface of the device moving away from the annular raising portion. The advantage lies in that the capsule itself determines the way the valve is constrained, but the capsule (its annular raising portion) is not deformable in engagement in the device and during beverage centrifugal preparation, so that the flow gap can be precisely controlled.

In contrast, the method of *Baecchi* is for adapting a hot drink dispensing machine that can accommodate two container's sizes and dispense selectively in the containers either hot water only (for small containers e.g., for expresso coffee) or a mixture of hot and cold water (for large containers, e.g., for freeze-dried or water-diluable powdered substances). For this, the large container has two annular, cuspidal, raised concentric elements 332 on the collar. The elements are pressed by the head 40 of the device which has two different water circuits, a central circuit with central ports 41 for delivering hot water and a lateral cold water circuit with port 42. The lateral cold water circuit is normally sealed by two raised concentric elements of a small container, but opens when a large container is inserted by "the annular element 332 closer to the center of the cover 331 to bend in a centripetal direction." As a result, the water flowing from the central port 41 is mixed with colder water flowing from the peripheral port 42. See *Baecchi*, for example, col. 4, lines 8-14; and Fig. 4.

Therefore, the object of *Baecchi* differs completely in that the system provides selective water supplying modes (hot or mixed) that depend on the type of capsules introduced in the device. This is very different in the claimed invention in which the method is for preparing a beverage by centrifugation of the capsule and in which the system provides a valve between the device and the capsule that opens by effect of the centrifuged liquid.

The solution of *Baecchi* is also very different in that the raised concentric elements of *Baecchi* are there for creating selective water sealing that may be broken for the large capsule by the one of the element (element 332) bending to let colder water to pass from the peripheral port and mixed with hot water coming from the central port. Therefore, contrary to the claimed

K-FEE SYSTEM GMBH, EX2003, page 4
NESPRESSO USA, INC. v. K-FEE SYSTEM GMBH
IPR2024-00299, U.S. PATENT 11,554,910

invention, the raised element for water to pass between the head and the capsule is **deformable** and more particular bends in centripetal direction. The element does **not** remain of constant dimension and cannot restrict the flow considerably, but its aim is to let the flow of colder water to mix with the hot water.

The secondary reference *Yoakim I* teaches an annular engaging portion 57 that comprises a pressing surface 59 applying a closing force on the peripheral rim 4 of the capsule to be able to restrict the flow of liquid. See *Yoakim I*, page 14, second full paragraph. Increased pressure of liquid on the internal surface of the pressing surface 59 can lift the pressing surface 59 to create a small passage for the liquid. See *Yoakim I*, page 17, first full paragraph. Nevertheless, *Yoakim I* does not even suggest a plate that is pressed to engage the pressing surface portion with the force-setting portion.

Therefore, *Baecchi* and *Yoakim I* alone or in combination fail to disclose or suggest applying a resilient load from a resilient member onto the plate to engage the pressing surface portion with the force-setting portion, <u>the annular raising portion being rigid to resist compression by the pressing surface portion applying a closure force thereto</u>; and <u>forcing the valve to open by the pressing surface portion of the valve being pushed against the resilient member by the centrifuged liquid that is moving away from the annular raising portion for creating a flow restriction gap while the annular raising portion remaining of a relatively constant dimension to restrict the centrifuged liquid flowpath through the restriction gap</u> as required by the present claims.

Moreover, the skilled artisan would not have been prompted to modify *Baecchi* and use the centrifugal forces to produce the beverage taught by *Yoakim I* because the system of *Baecchi* is so significantly different in its purpose and its solution. Even if the skilled artisan had tried so, the raised concentric element of *Baecchi* would **bend** to let the flow of liquid traverse, which is **not** the claimed invention because contrary to *Baecchi*, the flow of liquid in the claimed invention is restricted by the annular raising portion staying **constant,** and the flow path is obtained by pressing surface moving away from the raising portion. Therefore, the skilled artisan would not have combined *Baecchi* and *Yoakim I* to arrive at the present claims.

For at least the reasons discussed above, *Baecchi* and *Yoakim I* alone or in combination fail to disclose or suggest every element of amended independent Claims 1 and 16. Moreover, the skilled artisan would not have modified these references to arrive at these independent

K-FEE SYSTEM GMBH, EX2003, page 5
NESPRESSO USA, INC. v. K-FEE SYSTEM GMBH
IPR2024-00299, U.S. PATENT 11,554,910

claims. As a result, independent Claims 1 and 16, along with the claims that depend therefrom, are novel, nonobvious and distinguishable from *Baecchi* and *Yoakim I*.

Accordingly, Applicant respectfully requests that the obviousness rejections over *Baecchi* and *Yoakim I* be reconsidered and withdrawn.

In the Office Action, Claim 4 is rejected under 35 U.S.C. §103(a) as unpatentable over *Baecchi* in view of *Yoakim I* and in further view of French Patent No. 2041380 to Bourgogne ("*Bourgogone*"). Claim 11 is rejected under 35 U.S.C. §103(a) as unpatentable over *Baecchi* in view of *Yoakim I* and in further view of U.S. Patent App. Pub. No. 2010/0303965 to Mariller ("*Mariller*"). Claim 14 is rejected under 35 U.S.C. §103(a) as unpatentable over *Baecchi* in view of *Yoakim I* and in further view of U.S. Patent App. Pub. No. 2007/0224319 to Yoakim ("*Yoakim II*"). Claim 15 is rejected under 35 U.S.C. §103(a) as unpatentable over *Baecchi* in view of *Yoakim I* and in further view of U.S. Publ. No. 2011/0236541 to Gerbaulet ("*Gerbaulet*").

Applicant respectfully submits that the patentability of Claim 1 as discussed above renders moot the obviousness rejections of Claims 4, 11, 14 and 15 which depend therefrom. In this regard, the cited art fails to teach or suggest the elements of the dependent claim in combination with the novel and nonobvious elements of Claim 1. Moreover, the Patent Office merely relies on *Bourgogone* for the alleged disclosure of an increased thickness on the inward portion of the rim (Office Action, page 16), relies on *Mariller* for the alleged disclosure of protrusions on a rim that are embossed (Office Action, page 18), relies on *Yoakim II* for the alleged disclosure of an annular raising portion made of rubber elastic material (Office Action, page 18), and relies on *Gerbaulet* for the alleged disclosure of a gas vent in the annular raising portion (Office Action, page 20).

Even if these secondary references are combinable with *Baecchi* and *Yoakim I*, the resultant combination does not disclose or suggest applying a resilient load from a resilient member onto the plate to engage the pressing surface portion with the force-setting portion, <u>the annular raising portion being rigid to resist compression by the pressing surface portion applying a closure force thereto</u>; and <u>forcing the valve to open by the pressing surface portion of the valve being pushed against the resilient member by the centrifuged liquid that is moving away from the annular raising portion for creating a flow restriction gap while the annular raising portion remaining of a relatively constant dimension to restrict the centrifuged liquid flowpath through</u>

K-FEE SYSTEM GMBH, EX2003, page 6
NESPRESSO USA, INC. v. K-FEE SYSTEM GMBH
IPR2024-00299, U.S. PATENT 11,554,910

the restriction gap as required by the present claims. Moreover, as detailed above, the skilled artisan would not have modified the primary reference *Baecchi* to arrive at the present claims.

Accordingly, Applicant respectfully requests that the obviousness rejections over *Baecchi*, *Yoakim I*, *Bourgogone*, *Mariller*, *Yoakim II* and *Gerbaulet* be reconsidered and withdrawn.

Applicant notes that newly submitted Claims 17-19 have been added. No new matter has been added thereby. Applicant respectfully submits that the subject matter defined in newly submitted Claims 17-19 is patentable over the cited art for at least substantially the same reasons discussed above for independent Claim 1 from which these newly submitted claims directly or indirectly depend and further because of the additional features recited in these claims.

For example, Claim 17 recites that a first end of the resilient member is fitted into a base that abuts the plate, and a second end of the resilient member is connected to a screw element; and the method further comprises adjusting the resilient member by rotating the screw element. In contrast, the cited references do not teach adjustment of the resilient member.

Claim 18 recites that the resilient member is positioned on the central axis of the capsule. In contrast, the alleged resilient member of the cited references (springs 56 in *Yoakim*) is positioned on the periphery of the valve system.

Claim 19 recites that the annular groove matches a shape of the annular raising portion. The specification discloses that this feature positions and references the capsule in the device and supports the annular raising portion when being compressed. See specification, paragraph [0096]. In contrast, the alleged annular groove (reference number 233 in Fig. 9 and reference number 33 in Fig. 12 of *Baecchi*) has a different shape than the alleged annular raising portion and is merely an annular chamber.

For these additional reasons, the cited art fails to disclose or even suggest every element of Claims 17-19.

K-FEE SYSTEM GMBH, EX2003, page 7
NESPRESSO USA, INC. v. K-FEE SYSTEM GMBH
IPR2024-00299, U.S. PATENT 11,554,910

For the foregoing reasons, Applicant respectfully requests reconsideration of the above-identified patent application and earnestly solicits an early allowance of the same. In the event there remains any impediment to allowance of the claims that could be clarified in a telephonic interview, the Examiner is respectfully requested to initiate such an interview with the undersigned.

Respectfully submitted,

K&L GATES LLP

BY /Robert M. Barrett/
Robert M. Barrett
Reg. No. 30,142
Customer No. 29157
Telephone No. 312-807-4204

Dated: September 7, 2016

K-FEE SYSTEM GMBH, EX2003, page 8
NESPRESSO USA, INC. v. K-FEE SYSTEM GMBH
IPR2024-00299, U.S. PATENT 11,554,910