

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To: BRADLEY FACH
6800 RIESMAN LANE
CHARLOTTE, NC 28210

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Date of mailing
(day/month/year)

05 FEB 2020

Applicant's or agent's file reference
2929-001PCT1

FOR FURTHER ACTION

See paragraph 2 below

International application No.

PCT/IB2019/059313

International filing date (day/month/year)

30 October 2019

Priority date (day/month/year)

03 December 2018

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

IPC(8) - A23N 12/08; A47J 31/42; A47J 37/04; A47J 42/02; A47J 42/10; A47J 42/12 (2020.01)

CPC - A23N 12/083; A23N 12/08; A47J 31/42; A47J 37/04; A47J 37/047; A47J 42/02; A47J 42/10; A47J 42/12; A47J 42/16; A47J 42/20; A47J 42/52; A47J 43/04; A47J 43/07; B02C 1/08 (2020.01)

Applicant GRANOT, EITAN

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 43bis.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 66.1bis(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/US
Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450, Alexandria, VA 22313-1450
Facsimile No. 571-273-8300

Date of completion of this opinion

14 January 2020

Authorized officer

Blaine R. Copenheaver

PCT Helpdesk: 571-272-4300
PCT OSP: 571-272-7774

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/IB2019/059313

Box No. 1 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 (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:
 - a. forming part of the international application as filed:
 - in the form of an Annex C/ST.25 text file.
 - on paper or in the form of an image file.
 - b. furnished together with the international application under PCT Rule 13*ter*.1(a) for the purposes of international search only in the form of an Annex C/ST.25 text file.
 - c. furnished subsequent to the international filing date for the purposes of international search only:
 - in the form of an Annex C/ST.25 text file (Rule 13*ter*.1(a)).
 - on paper or in the form of an image file (Rule 13*ter*.1(b) and Administrative Instructions, Section 713).
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 forming part of the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
5. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/IB2019/059313

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step and industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	3-11, 13-20	YES
	Claims	1, 2, 12	NO
Inventive step (IS)	Claims	8, 10, 11, 17	YES
	Claims	1-7, 9, 12-16, 18-20	NO
Industrial applicability (IA)	Claims	1-20	YES
	Claims	None	NO

2. Citations and explanations:

Claims 1, 2, and 12 lack novelty under PCT Article 33(2) as being anticipated by Nestec SA (hereinafter Nestec).

Regarding claim 1, Nestec teaches a foodstuff preparation device (coffee bean container including roasting means and grinding means, abstract; see system 100, Fig. 5), the device comprising: a roasting chamber (container 10, Figs. 1a, 1b, 5; see container 10 includes roasting tube 11, Figs. 1a, 1b, 5) having a roasting cavity (inner volume 14, Figs. 1a, 1b); a heating element (device 20 comprises air means to deliver hot and pressurized air into the container for roasting, p. 7 ln. 34-37) configured to govern the temperature of the roasting cavity (air temperature is up to approximately 240°C and is delivered to the container 10 via roasting tube 11, p. 8 ln. 14-18); a first grinding stone (grinding means 131, Fig. 2; grinding means 131 may be a burr mill or mill stone, p. 11 ln. 37 to p. 12 ln. 1-3); a second grinding stone (grinding means 21, Fig. 2; grinding means 21 may be a burr mill or mill stone, p. 11 ln. 37 to p. 12 ln. 1-3); a funnel (sloped area 130, Fig. 2) for communicating a foodstuff, having a pre-ground particle size, between the first grinding stone and second grinding stone from the roasting chamber (sloped area 130 feeds the roasted beans from container 10 into grinding means, see p. 7 ln. 10-11, see also Figs. 1a, 1b, 2); and a grinding motor (motor, p. 8 ln. 2) configured to motivate the foodstuff between the first grinding stone and second grinding stone so that the foodstuff exits from between the first grinding stone and second grinding stone with a first ground particle size, the first ground particle size smaller than the pre-ground particle size (motor drives the assembly of the grinding means in order to grind the roasted coffee beans into ground coffee of a certain size, see p. 8 ln. 1-4; size of beans after being ground will be smaller than the pre-ground size).

Regarding claim 2, Nestec teaches the device of claim 1, and further Nestec teaches a roasting motor, the roasting motor configured to rotate the roasting chamber (container 10 may rotate, p. 10 ln. 35, thus a motor is needed to rotate the container 10).

Regarding claim 12, Nestec teaches a foodstuff preparation device (coffee bean container including roasting means and grinding means, abstract; see system 100, Fig. 5), the device comprising: a roasting chamber (container 10, Figs. 1a, 1b, 5; see container 10 includes roasting tube 11, Figs. 1a, 1b, 5) having a roasting cavity (inner volume 14, Figs. 1a, 1b); a heating element (device 20 comprises air means to deliver hot and pressurized air into the container for roasting, p. 7 ln. 34-37) configured to govern the temperature of the roasting cavity (air temperature is up to approximately 240°C and is delivered to the container 10 via roasting tube 11, p. 8 ln. 14-18); a first grinding stone (grinding means 131, Fig. 2; grinding means 131 may be a burr mill or mill stone, p. 11 ln. 37 to p. 12 ln. 1-3); a second grinding stone (grinding means 21, Fig. 2; grinding means 21 may be a burr mill or mill stone, p. 11 ln. 37 to p. 12 ln. 1-3); a funnel (sloped area 130, Fig. 2) for communicating a foodstuff, having a pre-ground particle size, between the first grinding stone and second grinding stone from the roasting chamber (sloped area 130 feeds the roasted beans from container 10 into grinding means, see p. 7 ln. 10-11, see also Figs. 1a, 1b, 2); a roasting motor, the roasting motor configured to rotate the roasting chamber (container 10 may rotate, p. 10 ln. 35, thus a motor is needed to rotate the container 10); and a grinding motor (motor, p. 8 ln. 2) configured to motivate the foodstuff between the first grinding stone and second grinding stone so that the foodstuff exits from between the first grinding stone and second grinding stone with a first ground particle size, the first ground particle size smaller than the pre-ground particle size (motor drives the assembly of the grinding means in order to grind the roasted coffee beans into ground coffee of a certain size, see p. 8 ln. 1-4; size of beans after being ground will be smaller than the pre-ground size).

Claims 6, 7, 15, and 16 lack an inventive step under PCT Article 33(3) as being obvious over Nestec SA (hereinafter Nestec).

Regarding claim 6, Nestec teaches the device of claim 1, and further Nestec teaches the first grinding stone (grinding means 131, Fig. 2; grinding means 131 may be a burr mill or mill stone, p. 11 ln. 37 to p. 12 ln. 1-3) comprises a first grinding interface (grinding means 131 includes a first grinding surface that interacts with grinding means 21, see Fig. 2), and wherein the second grinding stone (grinding means 21, Fig. 2; grinding means 21 may be a burr mill or mill stone, p. 11 ln. 37 to p. 12 ln. 1-3) comprises an upper grinding interface (grinding means 21 includes an upper grinding surface that interacts with grinding means 131, see Fig. 2). Nestec is silent as to the first grinding surface is planar in shape, and the upper grinding surface is planar in shape. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the first grinding surface and upper grinding surfaces be planar in shape, since a change in shape of an element involves only routine skill in the art, and since burr mills may be either conical or flat in shape. The motivation for doing so would be to create a finer and more consistent ground bean size, which may result in a more consistent flavor.

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/IB2019/059313

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of:

Regarding claim 7, Nestec teaches the device of claim 1, and further Nestec teaches the first grinding stone (grinding means 131, Fig. 2; grinding means 131 may be a burr mill or mill stone, p. 11 ln. 37 to p. 12 ln. 1-3) comprises a first grinding interface (grinding means 131 includes a first grinding surface that interacts with grinding means 21, see Fig. 2), and wherein the second grinding stone (grinding means 21, Fig. 2; grinding means 21 may be a burr mill or mill stone, p. 11 ln. 37 to p. 12 ln. 1-3) comprises a second grinding interface (grinding means 21 includes a second grinding surface that interacts with grinding means 131, see Fig. 2). Nestec is silent as to the first grinding surface is curved in shape, and the second grinding surface is curved in shape. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the first grinding surface and second grinding surfaces be curved or conical in shape, since a change in shape of an element involves only routine skill in the art, and since burr mills may be either conical or flat in shape. The motivation for doing so would be to provide a grinder that is easier to clean, as the grinding at an angle translates into fewer grounds being retained on the serrations of the grinding surface.

Regarding claim 15, Nestec teaches the device of claim 12, and further Nestec teaches the first grinding stone (grinding means 131, Fig. 2; grinding means 131 may be a burr mill or mill stone, p. 11 ln. 37 to p. 12 ln. 1-3) comprises a first grinding interface (grinding means 131 includes a first grinding surface that interacts with grinding means 21, see Fig. 2), and wherein the second grinding stone (grinding means 21, Fig. 2; grinding means 21 may be a burr mill or mill stone, p. 11 ln. 37 to p. 12 ln. 1-3) comprises an upper grinding interface (grinding means 21 includes an upper grinding surface that interacts with grinding means 131, see Fig. 2). Nestec is silent as to the first grinding surface is planar in shape, and the upper grinding surface is planar in shape. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the first grinding surface and upper grinding surfaces be planar in shape, since a change in shape of an element involves only routine skill in the art, and since burr mills may be either conical or flat in shape. The motivation for doing so would be to create a finer and more consistent ground bean size, which may result in a more consistent flavor.

Regarding claim 16, Nestec teaches the device of claim 12, and further Nestec teaches the first grinding stone (grinding means 131, Fig. 2; grinding means 131 may be a burr mill or mill stone, p. 11 ln. 37 to p. 12 ln. 1-3) comprises a first grinding interface (grinding means 131 includes a first grinding surface that interacts with grinding means 21, see Fig. 2), and wherein the second grinding stone (grinding means 21, Fig. 2; grinding means 21 may be a burr mill or mill stone, p. 11 ln. 37 to p. 12 ln. 1-3) comprises a second grinding interface (grinding means 21 includes a second grinding surface that interacts with grinding means 131, see Fig. 2). Nestec is silent as to the first grinding surface is curved in shape, and the second grinding surface is curved in shape. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the first grinding surface and second grinding surfaces be curved or conical in shape, since a change in shape of an element involves only routine skill in the art, and since burr mills may be either conical or flat in shape. The motivation for doing so would be to provide a grinder that is easier to clean, as the grinding at an angle translates into fewer grounds being retained on the serrations of the grinding surface.

Claims 3-5, 13, and 14 lack an inventive step under PCT Article 33(3) as being obvious over Nestec SA (hereinafter Nestec) in view of Tanaka.

Regarding claim 3, Nestec teaches the device of claim 2, and further Nestec teaches an agitator (mechanical device may be used to provide a helical movement of the beans during roasting, which mechanical device may be blades, p. 10 ln. 32-37), wherein the roasting motor is configured to rotate the roasting chamber in a first direction (container 10 may rotate, p. 10 ln. 35, thus a motor is needed to rotate the container 10). Nestec is silent as to the roasting motor is configured to rotate the roasting chamber in an opposing second direction, wherein rotation of the roasting chamber in the first direction causes the agitator to prevent the foodstuff from exiting the roasting chamber, and wherein rotation of the roasting chamber in the second direction causes the agitator to motivate the foodstuff to exit the roasting chamber into the funnel. Tanaka is in the field of coffee makers that roast and grind (coffee maker comprises a roasting portion and a grinding portion, abstract) and teaches a roasting motor (motor 22, Fig. 2) is configured to rotate the roasting chamber (roasting container 9, Figs. 1-5; "roasting container 9 is revolved by the motor 22," col. 4 ln. 65-66) in an opposing second direction (roasting container 9 may be rotated in an opposing direction, col. 6 ln. 33-34), wherein rotation of the roasting chamber in the first direction causes the agitator to prevent the foodstuff from exiting the roasting chamber (spiral projection for stirring may be provided on inside surface of roasting container 9 such that the first direction of rotation causes the coffee beans to be moved away from the transfer pipe 30, see col. 6 ln. 25-34), and wherein rotation of the roasting chamber in the second direction causes the agitator to motivate the foodstuff to exit the roasting chamber into the funnel (spiral projection for stirring may be provided on inside surface of roasting container 9 such that direction of rotation affects the coffee beans, and when roasting container 9 is rotated in an opposite direction, the coffee beans are forcibly transferred in a direction of the grinding portion 3 by way of the transfer pipe 30, col. 6 ln. 25-34). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the opposing rotation direction of Tanaka with the rotation of Nestec such that the beans may be urged toward the grinding portion once roasting has completed, in order to make sure the roasting chamber is emptied completely.

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/IB2019/059313

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of:

Regarding claim 4, Nestec teaches the device of claim 1, and further Nestec teaches the roasting chamber (container 10, Figs. 1a, 1b, 5; see container 10 includes roasting tube 11, Figs. 1a, 1b, 5). Nestec is silent as to the roasting chamber is movable between a first position and a second position, wherein foodstuff is prevented from exiting the roasting chamber when the roasting chamber is in the first position, and wherein foodstuff exits the roasting chamber into the funnel when the roasting chamber is in the second position. Tanaka is in the field of coffee makers that roast and grind (coffee maker comprises a roasting portion and a grinding portion, abstract) and teaches a roasting chamber (roasting container 9, Figs. 1-5) is movable between a first position (see first position of roasting container 9 for loading coffee beans, Fig. 5, see col. 4 ln. 42-45) and a second position (see inclined and operational position of roasting container 9, Figs. 1-4), wherein foodstuff is prevented from exiting the roasting chamber when the roasting chamber is in the first position (in upright and loading position of roasting container 9, the opening and closing mechanism 23 would be closed, thus not allowing coffee beans to travel from roasting container 9 to transfer pipe 30, see col. 5 ln. 33-40), and wherein foodstuff exits the roasting chamber into the funnel when the roasting chamber is in the second position (opening and closing mechanism 23 opens after roasting and cooling, when roasting container 9 is in an inclined position, and allows beans to travel from roasting container 9 to transfer pipe 30, see col. 5 ln. 33-40). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the multiple positions of Tanaka with the roasting chamber of Nestec in order to provide a loading position for the materials to be roasted and ground.

Regarding claim 5, modified Nestec teaches the device of claim 4, and further Nestec teaches a roasting motor, the roasting motor configured to rotate the roasting chamber (container 10 may rotate, p. 10 ln. 35, thus a motor is needed to rotate the container 10), and further comprising an agitator (mechanical device may be used to provide a helical movement of the beans during roasting, which mechanical device may be blades, p. 10 ln. 32-37), wherein the roasting motor is configured to rotate the roasting chamber in a first direction (container 10 may rotate, p. 10 ln. 35, thus a motor is needed to rotate the container 10). Nestec is silent as to the roasting motor is configured to rotate the roasting chamber in an opposing second direction, wherein rotation of the roasting chamber in the first direction causes the agitator to prevent the foodstuff from exiting the roasting chamber, and wherein rotation of the roasting chamber in the second direction causes the agitator to motivate the foodstuff to exit the roasting chamber into the funnel. Tanaka is in the field of coffee makers that roast and grind (coffee maker comprises a roasting portion and a grinding portion, abstract) and teaches a roasting motor (motor 22, Fig. 2) is configured to rotate the roasting chamber (roasting container 9, Figs. 1-5; "roasting container 9 is revolved by the motor 22," col. 4 ln. 65-66) in an opposing second direction (roasting container 9 may be rotated in an opposing direction, col. 6 ln. 33-34), wherein rotation of the roasting chamber in the first direction causes the agitator to prevent the foodstuff from exiting the roasting chamber (spiral projection for stirring may be provided on inside surface of roasting container 9 such that the first direction of rotation causes the coffee beans to be moved away from the transfer pipe 30, see col. 6 ln. 25-34), and wherein rotation of the roasting chamber in the second direction causes the agitator to motivate the foodstuff to exit the roasting chamber into the funnel (spiral projection for stirring may be provided on inside surface of roasting container 9 such that direction of rotation affects the coffee beans, and when roasting container 9 is rotated in an opposite direction, the coffee beans are forcibly transferred in a direction of the grinding portion 3 by way of the transfer pipe 30, col. 6 ln. 25-34). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the opposing rotation direction of Tanaka with the rotation of Nestec such that the beans may be urged toward the grinding portion once roasting has completed, in order to make sure the roasting chamber is emptied completely.

Regarding claim 13, Nestec teaches the device of claim 12, and further Nestec teaches an agitator (mechanical device may be used to provide a helical movement of the beans during roasting, which mechanical device may be blades, p. 10 ln. 32-37), wherein the roasting motor is configured to rotate the roasting chamber in a first direction (container 10 may rotate, p. 10 ln. 35, thus a motor is needed to rotate the container 10). Nestec is silent as to the roasting motor is configured to rotate the roasting chamber in an opposing second direction, wherein rotation of the roasting chamber in the first direction causes the agitator to prevent the foodstuff from exiting the roasting chamber, and wherein rotation of the roasting chamber in the second direction causes the agitator to motivate the foodstuff to exit the roasting chamber into the funnel. Tanaka is in the field of coffee makers that roast and grind (coffee maker comprises a roasting portion and a grinding portion, abstract) and teaches a roasting motor (motor 22, Fig. 2) is configured to rotate the roasting chamber (roasting container 9, Figs. 1-5; "roasting container 9 is revolved by the motor 22," col. 4 ln. 65-66) in an opposing second direction (roasting container 9 may be rotated in an opposing direction, col. 6 ln. 33-34), wherein rotation of the roasting chamber in the first direction causes the agitator to prevent the foodstuff from exiting the roasting chamber (spiral projection for stirring may be provided on inside surface of roasting container 9 such that the first direction of rotation causes the coffee beans to be moved away from the transfer pipe 30, see col. 6 ln. 25-34), and wherein rotation of the roasting chamber in the second direction causes the agitator to motivate the foodstuff to exit the roasting chamber into the funnel (spiral projection for stirring may be provided on inside surface of roasting container 9 such that direction of rotation affects the coffee beans, and when roasting container 9 is rotated in an opposite direction, the coffee beans are forcibly transferred in a direction of the grinding portion 3 by way of the transfer pipe 30, col. 6 ln. 25-34). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the opposing rotation direction of Tanaka with the rotation of Nestec such that the beans may be urged toward the grinding portion once roasting has completed, in order to make sure the roasting chamber is emptied completely.

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/IB2019/059313

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of:

Regarding claim 14, Nestec teaches the device of claim 12, and further Nestec teaches the roasting chamber (container 10, Figs. 1a, 1b, 5; see container 10 includes roasting tube 11, Figs. 1a, 1b, 5). Nestec is silent as to the roasting chamber is movable between a first position and a second position, wherein foodstuff is prevented from exiting the roasting chamber when the roasting chamber is in the first position, and wherein foodstuff exits the roasting chamber into the funnel when the roasting chamber is in the second position. Tanaka is in the field of coffee makers that roast and grind (coffee maker comprises a roasting portion and a grinding portion, abstract) and teaches a roasting chamber (roasting container 9, Figs. 1-5) is movable between a first position (see first position of roasting container 9 for loading coffee beans, Fig. 5, see col. 4 ln. 42-45) and a second position (see inclined and operational position of roasting container 9, Figs. 1-4), wherein foodstuff is prevented from exiting the roasting chamber when the roasting chamber is in the first position (in upright and loading position of roasting container 9, the opening and closing mechanism 23 would be closed, thus not allowing coffee beans to travel from roasting container 9 to transfer pipe 30, see col. 5 ln. 33-40), and wherein foodstuff exits the roasting chamber into the funnel when the roasting chamber is in the second position (opening and closing mechanism 23 opens after roasting and cooling, when roasting container 9 is in an inclined position, and allows beans to travel from roasting container 9 to transfer pipe 30, see col. 5 ln. 33-40). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the multiple positions of Tanaka with the roasting chamber of Nestec in order to provide a loading position for the materials to be roasted and ground.

Claims 9 and 18-20 lack an inventive step under PCT Article 33(3) as being obvious over Nestec SA (hereinafter Nestec) in view of Eugster/Frismag AG (hereinafter Eugster).

Regarding claim 9, Nestec teaches the device of claim 1, and further Nestec teaches a third grinding stone (device 20 may include containers 10 and 10', which are configured the same way, thus container 10' includes a third grinding means 131', see p. 9 ln. 30-32, see also Fig. 7). Nestec is silent as to foodstuff exiting from between the first grinding stone and second grinding stone are communicated between the second grinding stone and third grinding stone. Eugster is in the field of coffee grinders (grinding mechanism for coffee beans, abstract) and teaches foodstuff exiting from between the first grinding stone (milling cone 1.1, Figs. 1, 3-6) and second grinding stone (grinding ring 1.2, Figs. 1, 3-6) are communicated between the second grinding stone and third grinding stone (milling disk 1.3, Figs. 1, 3-6; see material is ground first between milling cone 1.1 and grinding ring 1.2 in grinding gap SP1, then it is deflected outwardly and down such that it is ground between grinding ring 1.2 and grinding disk 1.2 in grinding gap SP2, see para. 0055, Fig. 5). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the third disk of Eugster with the device of Nestec to provide a way for the material to be ground in stages, producing an even finer particle size than the first two stones are able to produce.

Regarding claim 18, Nestec teaches the device of claim 12, and further Nestec teaches a third grinding stone (device 20 may include containers 10 and 10', which are configured the same way, thus container 10' includes a third grinding means 131', see p. 9 ln. 30-32, see also Fig. 7). Nestec is silent as to foodstuff exiting from between the first grinding stone and second grinding stone are communicated between the second grinding stone and third grinding stone. Eugster is in the field of coffee grinders (grinding mechanism for coffee beans, abstract) and teaches foodstuff exiting from between the first grinding stone (milling cone 1.1, Figs. 1, 3-6) and second grinding stone (grinding ring 1.2, Figs. 1, 3-6) are communicated between the second grinding stone and third grinding stone (milling disk 1.3, Figs. 1, 3-6; see material is ground first between milling cone 1.1 and grinding ring 1.2 in grinding gap SP1, then it is deflected outwardly and down such that it is ground between grinding ring 1.2 and grinding disk 1.2 in grinding gap SP2, see para. 0055, Fig. 5). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the third disk of Eugster with the device of Nestec to provide a way for the material to be ground in stages, producing an even finer particle size than the first two stones are able to produce.

Regarding claim 19, modified Nestec teaches the device of claim 18, and further Nestec teaches the second grinding stone (grinding means 21, Fig. 2; grinding means 21 may be a burr mill or mill stone, p. 11 ln. 37 to p. 12 ln. 1-3) comprises a lower grinding interface (grinding means 21 includes a grinding surface that interacts with grinding means 131, see Fig. 2), and wherein the third grinding stone (device 20 may include containers 10 and 10', which are configured the same way, thus container 10' includes a third grinding means 131', see p. 9 ln. 30-32, see also Fig. 7) comprises a third grinding interface (device 20 may include containers 10 and 10', which are configured the same way, thus container 10' includes a third grinding means 131', which includes a grinding interface, see p. 9 ln. 30-32, see also Fig. 7). Nestec is silent as to the lower grinding interface is curved in shape, and the third grinding interface is curved in shape. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the lower grinding surface and third grinding surfaces be curved in shape, since a change in shape of an element involves only routine skill in the art, and since burr mills may be either conical or flat in shape. The motivation for doing so would be to provide a grinder that is easier to clean, as the grinding at an angle translates into fewer grounds being retained on the serrations of the grinding surface.

Regarding claim 20, modified Nestec teaches the device of claim 18, and further Nestec teaches the second grinding stone (grinding means 21, Fig. 2; grinding means 21 may be a burr mill or mill stone, p. 11 ln. 37 to p. 12 ln. 1-3) comprises a lower grinding interface (grinding means 21 includes a grinding surface that interacts with grinding means 131, see Fig. 2), and wherein the third grinding stone (device 20 may include containers 10 and 10', which are configured the same way, thus container 10' includes a third grinding means 131', see p. 9 ln. 30-32, see also Fig. 7) comprises a third grinding interface (device 20 may include containers 10 and 10', which are configured the same way, thus container 10' includes a third grinding means 131', which includes a grinding interface, see p. 9 ln. 30-32, see also Fig. 7). Nestec is silent as to the lower grinding interface is conical in shape, and the third grinding interface is conical in shape. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the lower grinding surface and third grinding surfaces be conical in shape, since a change in shape of an element involves only routine skill in the art, and since burr mills may be either conical or flat in shape. The motivation for doing so would be to provide a grinder that is easier to clean, as the grinding at an angle translates into fewer grounds being retained on the serrations of the grinding surface.

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/IB2019/059313

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of:

Claims 8, 10, 11, and 17 meet the criteria set out in PCT Article 33(2)-(3), because the prior art does not teach or fairly suggest:

Regarding claim 8, the prior art of record, individually or in combination, does not teach or fairly suggest the device of claim 1, further comprising a third grinding stone and a fourth grinding stone, wherein foodstuff exiting from between the first grinding stone and second grinding stone are communicated between the third grinding stone and fourth grinding stone.

The following prior art is made of record: Regarding claim 8, Nestec teaches the device of claim 1, and further Nestec teaches a third grinding stone and a fourth grinding stone (device 20 may include containers 10 and 10', which are configured the same way, thus container 10' includes a third grinding means 131' and fourth grinding means 21', see p. 9 ln. 30-32, see also Fig. 7). Nestec is silent as to foodstuff exiting from between the first grinding stone and second grinding stone are communicated between the third grinding stone and fourth grinding stone.

Claims 10 and 11 depend from claim 8, and therefore meet the criteria set out in PCT Article 33(2)-(3) for at least the same reasons as claim 8.

Regarding claim 17, the prior art of record, individually or in combination, does not teach or fairly suggest the device of claim 12, further comprising a third grinding stone and a fourth grinding stone, wherein foodstuff exiting from between the first grinding stone and second grinding stone are communicated between the third grinding stone and fourth grinding stone.

The following prior art is made of record: Regarding claim 17, Nestec teaches the device of claim 12, and further Nestec teaches a third grinding stone and a fourth grinding stone (device 20 may include containers 10 and 10', which are configured the same way, thus container 10' includes a third grinding means 131' and fourth grinding means 21', see p. 9 ln. 30-32, see also Fig. 7). Nestec is silent as to foodstuff exiting from between the first grinding stone and second grinding stone are communicated between the third grinding stone and fourth grinding stone.

Claims 1-20 meet the criteria set out in PCT Article 33(4), and thus have industrial applicability because the subject matter claimed can be made or used in industry.