

Claims

1. Roasting and processing apparatus for coffee beans comprising a roasting device (50)
and an associated coffee processing device (60, 70);
5 the roasting device (50) being configured for receiving coffee beans of a certain type
that will be roasted, the roasting device comprising reading means (53) to identify the
characteristics of the coffee beans dispensed to it, the roasting device (50) further
comprising a control unit configuring the roasting profile of the beans according to the
10 characteristics retrieved from the reading means (53) and/or from the characteristics of
the beans in a database (51) in this control unit and/or according to the user input; the
roasted coffee beans being transferred into a coffee processing device (60, 70) for
beverage preparation, the roasting device (50) comprising a data transfer function to
communicate product parameters of the roasted coffee beans of a certain type to the
15 coffee processing device (60, 70);

the coffee processing device (60, 70) receiving roasted coffee beans of one or more
types from the roasting device (50); the coffee processing device comprising a data
reader (62, 72) to obtain the information of the product parameters of the roasted coffee
20 beans; the coffee processing device (60, 70) further comprising a control unit
configured to adapt the processing parameters used for the beverage preparation as a
function of the product parameters of the roasted coffee beans.
2. Roasting and processing apparatus for coffee beans according to claim 1 wherein the
25 coffee processing device (60, 70) comprises a coffee grinder (60) and/or a coffee
beverage extraction device (70).
3. Roasting and processing apparatus for coffee beans according to any of claims 1-2
wherein the processing parameters used for the beverage preparation comprise
30 grinding and/or partial grinding parameters and/or coffee extraction parameters.
4. Roasting and processing apparatus for coffee beans according to any of the previous
claims wherein the coffee beans are green and/or partially roasted coffee beans.
- 35 5. Roasting and processing apparatus for coffee beans according to any of the previous
claims wherein the coffee beans received by the roasting device (50) comprise
identification means (41) with the characteristics of these coffee beans, to be read by

the reading means (53) in the roasting device (50), these identification means (41) being optical identification means, such as a barcode, OID and/or a QR code, and/or electromagnetic identification means such as a RFID tag.

- 5 6. Roasting and processing apparatus for coffee beans according to any of the previous claims wherein the characteristics of the coffee beans received by the roasting device (50) are one or a plurality of the following: coffee beans type, coffee beans origin, batch volume, recommended roasting level or levels, date of harvest, date of production, production data, farmer data, date of expiration, company and or marketing info.
- 10 7. Roasting and processing apparatus for coffee beans according to any of the previous claims wherein the product parameters of the roasted coffee beans of a certain type comprise the characteristics of the coffee beans and one or a plurality of the following: roasting level, roasting profile, CTN, aroma profile chart, adequate beverage recommendation, roasting date, best limit consumption date.
- 15 8. Roasting and processing apparatus for coffee beans according to any of the previous claims, wherein the processing parameters used by the coffee processing device (60, 70) for the beverage preparation are adapted as a function of the type of beverage to be prepared, in combination with the product parameters of the roasted coffee beans.
- 20 9. Roasting and processing apparatus for coffee beans according to any of the previous claims wherein the data transfer function between the roasting device (50) and the associated coffee processing device (60, 70) is of wireless type such as Wifi, Bluetooth or NFC.
- 25 10. Roasting and processing apparatus for coffee beans according to any of claims 1-8 wherein the data transfer function between the roasting device (50) and the associated coffee processing device (60, 70) is of wired type such as serial communication.
- 30 11. Roasting and processing apparatus for coffee beans according to any of the previous claims wherein the roasting device (50) has data transmission function of wireless type such as Wifi, Bluetooth or NFC and/or of wired type such as serial.
- 35 12. Roasting and processing apparatus for coffee beans according to any of the previous claims wherein the coffee processing device (50) has data receiving function of wireless type such as Wifi, Bluetooth or NFC and/or of wired type such as serial.

13. Roasting and processing apparatus for coffee beans according to any of the previous claims wherein the data between the roasting device (50) and the associated coffee processing device (60, 70) are transferred directly between the two devices and/or indirectly via a third mean (bridge) such as smartphone application or cloud service.

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14. Method for roasting and processing coffee beans using a roasting and processing apparatus according to any of claims 1-13, comprising the following steps:

- dispensing a certain quantity of coffee beans in the roasting device (50);
- reading the characteristics of the coffee beans dispensed;
- 10 - carrying out a roasting process according to the characteristics read and/or a database information and/or a user's choice or selection;
- delivering the roasted coffee beans into a processing apparatus (60, 70) with encoded product parameters of these coffee beans;
- reading the product parameters in the processing apparatus;
- 15 - carrying out the grinding and/or the beverage preparation according to the product parameters read.

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15. Use of a roasting and processing apparatus according to any of claims 1-13 for delivering a coffee beverage of a certain type and/or a certain quantity of grinded coffee.

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