CLAIMS

1. A method to dry at least one wet removable cell (222a, 222c) of an electrostatic precipitator of a smoke treating unit (2) of a roasting system (100), said system comprising :
- a coffee beans roasting apparatus (1), and
- a smoke treating unit (2) configured to treat the smoke produced by the roasting apparatus, said smoke treating unit comprising said electrostatic precipitator (222),
. said electrostatic precipitator comprising said least one removable cell, and
. said cell comprising ionization wires, collecting electrodes and repelling electrodes, and
. said wires and electrodes being supplied with an electrical power,
wherein the method comprises at least the step of passing hot air (A3) through said wet removable cell, while said cell is positioned inside the electrostatic precipitator (222) and while said cell is switched off, and
wherein said hot air is generated by the coffee beans roasting apparatus while the roasting chamber (12) of said apparatus is empty, in particular void of coffee beans.

2. Method according to the precedent claim wherein, while passing hot air through the at least one cell of the electrostatic precipitator, said method comprises the steps of :
S1 - keeping the at least one cell (222a, 222b) of the electrostatic precipitator switched off during one first pre-determined period, then
S2 – at the end of said first pre-determined period, electrically switching on said cell, and
. if short-circuit is detected during a second pre-determined period, implementing steps S1 and S2 again,
. if no short-circuit is detected during the second pre-determined period, finishing the operation of passing air through the cell.

3. Method according to the precedent claim, wherein the electrostatic precipitator (222) comprises several cells (222a, 222b) and, during step S2, each cell is successively switched on in order to detect short circuit on at least one cell.

4. Method according to Claims 2 or 3, wherein :
- if no short-circuit is detected during step S2, an intermediate checking step S3 is implemented before finishing the operation of passing air through the at least one cell, wherein during said intermediate checking step S3 hot air is passed through the cell of the electrostatic precipitator while said cell is switched on, and
- if short-circuit is detected during step S3, steps S1 and S2 are implemented again.

5. Method according to and one of Claims 2 to 3, wherein the step of finishing the operation of passing hot air through the cell comprises the step of passing cooling air through the cell.

6. Method according to any one of the precedent claims wherein the smoke treating unit comprises an active carbon filter (221) and/or at least one metallic mesh filter (223).

7. Method according to the precedent claim wherein :
- the smoke treating unit comprises an active carbon filter, and
- hot air is passed through the cell while keeping the temperature of the active carbon filter at at most 65 °C.

8. A system (100) of a coffee beans roasting apparatus (1) and a smoke treating unit (2), wherein said smoke treating unit comprises a smoke driver (23) and at least an electrostatic precipitator (222), said electrostatic precipitator comprising at least one removable cell of associated wires and plates (222a, 222b), and
wherein said coffee beans roasting apparatus comprises a heating device (13), and
wherein said system comprises a control system (3) operable to control :
- the heating device of the roasting apparatus,
- the smoke driver of the smoke treating unit, and
- the electrical switching of the at least one cell of the electrostatic precipitator,
wherein the control system is configured to implement the method according to any one of Claims 1 to 7.

9. A system of a coffee beans roasting apparatus and a smoke treating unit according to the precedent claim, wherein, during the step of finishing the operation of a drying mode, the control system is configured to deactivate the heating device (13) of the roasting apparatus and to actuate the smoke driver (23) of the smoke treating unit in order to pass cooling air through the at least one cell.

10. A system of a coffee beans roasting apparatus and a smoke treating unit according to the precedent claim, wherein the smoke treating unit comprises an air inlet (24) configured to introduce ambient air inside the smoke filtering sub-unit (22).

11. A system of a coffee beans roasting apparatus and a smoke treating unit according to any one of Claims 8 to 10, wherein the smoke treating unit comprises an active carbon filter (221), and

the control system of the system is configured to operate the heating device (13) of the roasting apparatus and the smoke driver (23) of the smoke treating unit to maintain the temperature of the active carbon filter at at most 65 °C.

12. A computer program comprising instructions which, when executed by a computer, processor or control unit (30), cause the computer, processor or control unit (30) to perform the method of any one of Claims 1 to 7.

13. A computer readable storage medium comprising instructions which, when executed by a computer, processor or control unit cause the computer, processor or control unit (30) to carry out the method of any one of Claims 1 to 7.