

CLAIMS

1. Process for subjecting a surface of the skin or of the hair to an abrasive and/or stimulating action, comprising projecting onto said surface a flow of at least one composition comprising a vector liquid and solid particles, this flow being generated from the collision of at least two jets generated by at least two nozzles (13) of a dispensing device (10), the nozzles being oriented such that their jets encounter one another, at least one nozzle (13) being supplied with a pressure of at least 4 bar and with a vector-liquid flow rate of less than or equal to 10 L/min.
2. Process according to Claim 1, the vector liquid comprising water, better still being composed predominantly of water.
3. Process according to either of Claims 1 and 2, the flow rate being between 0.4 L/min and 4 L/min, better still between 1 and 4 L/min.
4. Process according to any one of the preceding claims, the pressure being greater than or equal to 6 bar, better still between 6 and 20 bar, even better still between 8 and 20 bar.
5. Process according to any one of the preceding claims, the nozzles (13) being oriented with an angle of between 30 and 120° with respect to one another, preferably of about 90° with respect to one another.
6. Process according to any one of the preceding claims, the dispensing device (10) comprising a hand piece (11) having a cavity (89) opened to the outside, within which the jets emitted by the nozzles (13) encounter one another.
7. Process according to any one of the preceding claims, the solid particles being present in the composition upstream of the nozzle(s) (13) in a concentration by weight of greater than or equal to 0.5% relative to the total weight of the composition, better still between 0.5% and 5% or 5% and 25%.
8. Process according to any one of the preceding claims, the particles having a hardness on the Mohs scale of greater than or equal to 3.
9. Process according to Claim 8, the particles being chosen from powders of alumina, of silica, of aluminosilicates, of carbonates, or of a material coated with a silica, an alumina or an aluminosilicate, and mixtures thereof.
10. Process according to any one of the preceding claims, the particle speed at the moment they impact said surface being greater than or equal to 8 m/s and preferably greater than 15 m/s.

11. Process according to any one of the preceding claims, said surface being a surface of the hair, the treatment in particular aiming to remove the edges of flaking and to improve the sheen of the hair, to sensitize the surface of the hair, and/or to degrease the hair.

12. Process according to any one of Claims 1 to 9, said surface being a skin surface,
5 in particular a scalp surface, the treatment aiming in particular to exfoliate or remove the dandruff, to stimulate the skin, in particular of the scalp, for the purposes of massaging or relaxing, and/or to treat acneic healthy skin.

13. Process according to any one of the preceding claims, the particle size being between 0.1 and 500 microns.

10 14. Process according to any one of the preceding claims, comprising the step consisting in rinsing said surface with the same device as that used for projecting the composition, by projecting water without said solid particles and/or water with a surfactant or a compound capable of dissolving the particles.

15 15. Process according to any one of the preceding claims, in which said particles are suspended by mechanical stirring in a reservoir and they are left to settle, and, during the settling, the composition is suctioned from this reservoir so as to allow the nature and/or the concentration of the particles present in the flow distributed to vary due to the settling taking place in the reservoir.

20 16. Process according to the preceding claim, in which at least two powders of different densities, in particular calcium carbonate and an aluminosilicate, are mixed in said reservoir.

17. Process according to any one of the preceding claims, the particles having a density of less than 1 g/cm³, preferably being chosen from cellulose aerogels and powders.

25 18. Process according to any one of the preceding claims, the particles being water-soluble and taken from a reservoir (24) where they are in suspension in a liquid in which they are not soluble, this liquid being in particular ethanol.

19. Process according to any one of the preceding claims, the particles being generated at the time of use by bringing together two compounds which react together to form solid particles, these compounds being in particular injected into the water supplying a pump
30 (14) of the device upstream of said pump.

20. Device (10) for treating the skin or the hair, in particular for the implementation of the process as defined in any one of the preceding claims, comprising:

- a device for dispensing a liquid cosmetic composition comprising a vector liquid and solid particles entrained by this liquid, this device comprising at least two nozzles

(13) oriented such that their jets encounter one another to generate a flow that is dispensed on the skin or hair, at least one nozzle being supplied with the vector liquid at a pressure of at least 4 bar so as to deliver a flow of composition at a flow rate of less than or equal to 10 L/min, and

- a reservoir (16; 24) containing said composition or the solid particles to be mixed with the vector liquid, or at least one reservoir (30; 31) containing a compound capable of generating, by reacting with at least one other compound, said solid particles.

21. Device according to the preceding claim, comprising a pump (14) connected to said at least one nozzle (13).

22. Device according to either of Claims 20 and 21, comprising two nozzles (13) oriented such that their jets encounter one another, the axes (X_1 , X_2) of the nozzles preferably making an angle between them of between 60° and 120° , in particular of about 90° .

23. Device according to any one of Claims 20 to 22, comprising a stirrer (22) for suspending said particles in the reservoir.

24. Device according to the preceding claim, the device being arranged to remove the composition to be dispensed by suctioning from this reservoir (16), the suctioning being carried out at a distance from the bottom of the reservoir.

25. Device according to any one of Claims 20 to 23, comprising two reservoirs (30, 31) containing compounds which react together, and a system for injecting (26, 27) these compounds so as to allow them to mix with the vector liquid and to react, the reaction of the compounds producing solid particles.