CLAIMS

1. System (1) for treating a head of hair, comprising:

- a pipe (28) for circulating a liquid,
- a device (24) for feeding the pipe (28) with water,
- at least one source (21) of product, the product (P1) comprising one or more surfactants,
- a device (29) for injecting product into the pipe (28) to form a treatment solution comprising one or more surfactants in a content ranging from 0.35% to 1.5% by weight of surfactant(s) relative to the total weight of the treatment solution,
- a dispensing device (11) for delivering the treatment solution onto the head of hair (B) with a flow rate of between 0.5 and 5 L/min, better still between 0.8 and 3 L/min,

the dispensing device being a shower head connected to a flexible hose.

2. Hair treatment system according to Claim 1, the surfactant(s) being present in the treatment solution in an amount ranging from 0.6% to 1.2% by weight relative to the total weight of the treatment solution.

3. Hair treatment system according to Claim 1 or 2, the water hardness being less than or equal to 45°f.

4. System according to any one of the preceding claims, the surfactant(s) being chosen from anionic surfactants, amphoteric surfactants, nonionic surfactants and mixtures thereof, preferably from anionic surfactants.

5. System according to any one of the preceding claims, the treatment solution comprising one or more anionic surfactants in a content ranging from 0.25% to 1% by weight relative to the total weight of the treatment solution, better still from 0.4% to 1% by weight, preferably strictly less than 1% relative to the total mass of the treatment solution.

6. System according to any one of the preceding claims, the product injection device (29) injecting between 2.5 g/minute and 20 g/minute of anionic surfactants into the pipe.

7. System according to any one of the preceding claims, comprising a pressure booster (50) to increase the pressure of the water entering the dispensing device (11) above the pressure of the water entering the system, the treatment solution preferably being delivered at a pressure of between 5 and 40 bar, better still between 10 and 25 bar.

8. System according to any one of the preceding claims, the dispensing device (11) comprising nozzles arranged so as to cause two jets leaving the dispensing device to collide.

9. System according to any one of the preceding claims, comprising a member (30) for controlling the amount of water dispensed, and/or the amount of product injected into the water and/or the flow rate of liquid delivered by the dispensing device.

10. System according to any one of the preceding claims, comprising a user interface (40) for selecting a setting, the system being configured to act on an adjustment device (30) for varying the content of product as a function of the selected setting, and/or to input at least one item of information relating to a treatment result obtained with the selected setting.

11. System according to any one of the preceding claims, comprising a means (DB1) for memorizing at least one setting by associating it with a person and/or a person's identification code.

12. Washing system (1) comprising:

- a pipe (28) for circulating a liquid,
- a device (24) for feeding the pipe (28) with water,
- at least one source (21) of product, the product (P1) comprising one or more surfactants,
- a device (29) for injecting product into the pipe (28) to form a treatment solution comprising one or more surfactants in a content ranging from 0.35% to 1.5% by weight relative to the total weight of the treatment solution,
- a dispensing device (11) for delivering the treatment solution with a flow rate of between 0.5 and 5 L/min, better still between 0.8 and 3 L/min,

the dispensing device being a shower head connected to a flexible hose.

13. Washing process, especially for washing a head of hair, comprising the treatment step consisting in spraying the head of hair (B) with a treatment solution comprising water and one or more surfactants at a flow rate of between 0.5 and 5 L/minute, better still between 0.8 and 3 L/minute, the treatment solution comprising one or more surfactants in a content ranging from 0.35% to 1.5% by weight of surfactant(s) relative to the total weight of the treatment solution.

the process being performed using the system (1) according to any one of Claims 1 to 11.

14. Process according to Claim 13, the treatment step lasting between 1 and 30 seconds and better still between 3 and 15 seconds.

15. Process according to any one of Claims 13 or 14, comprising a step of rinsing the head of hair with a rinsing solution after the treatment step.

16. Process according to Claim 15, the rinsing solution being water, optionally containing other compounds with the exception of surfactants.

17. Process according to Claim 15 or 16, the rinsing step lasting less than 1 minute and better still less than 40 seconds.