

Claims

1. A distribution system (10) for a process fluid for a chemical and/or electrolytic surface treatment of a substrate (20), comprising:
- 5 - a distribution body (11), and
- a distribution medium (12),
- wherein the distribution body (11) comprises several openings (13) for a process fluid and/or an electric current,
- wherein the distribution medium (12) covers at least some of the openings (13) of the
- 10 distribution body (11), and
- wherein the distribution medium (12) comprises a netted framework with passages (14) to distribute the process fluid and/or the electric current from the distribution body (11).
- 15 2. Distribution system (10) according to claim 1, wherein the netted framework forms a sponge with randomly distributed passages (14).
3. Distribution system (10) according to claim 1, wherein the netted framework forms a
- 20 grid with evenly distributed passages (14).
4. Distribution system (10) according to one of the preceding claims, wherein the distribution medium (12) is porous.
5. Distribution system (10) according to one of the preceding claims, wherein the
- 25 distribution medium (12) has a porosity in a range of 0.1 to 0.95, preferably 0.4 to 0.9 and more preferably 0.6 to 0.85.
6. Distribution system (10) according to one of the preceding claims, wherein the
- 30 distribution medium (12) has a hydraulic conductivity in a range of 10^{-4} to 10 m/s, preferably 10^{-3} to 1 m/s and more preferably 10^{-3} to 10^{-1} m/s.

7. Distribution system (10) according to claim 5 or 6, wherein the porosity and/or the hydraulic conductivity is anisotropic.
8. Distribution system (10) according to one of the preceding claims, wherein the netted framework comprises a single layer of cells and passages (14).
9. Distribution system (10) according to one of the claims 1 to 7, wherein the netted framework comprises at least two layers of cells and passages (14).
10. Distribution system (10) according to the preceding claim, wherein the passages (14) of adjacent layers of cells and passages (14) are partially displaced relative to each other.
11. Distribution system (10) according to one of the preceding claims, wherein the passages (14) are interconnected.
12. Distribution system (10) according to one of the preceding claims, wherein the openings (13) covered by the distribution medium (12) are jet holes (15) configured to direct the process fluid towards the substrate (20).
13. Distribution system (10) according to one of the preceding claims, wherein the openings (13) covered by the distribution medium (12) are drain holes (16) configured to drain off the process fluid relative to the substrate (20).
14. Distribution system (10) according to one of the preceding claims, wherein the distribution medium (12) covers the distribution body (11) at least partially.
15. A manufacturing method for a distribution system (10) for a process fluid for a chemical and/or electrolytic surface treatment of a substrate (20), comprising:
- providing a distribution body (11), wherein the distribution body (11) comprises several openings (13) for a process fluid and/or an electric current, and
 - covering at least some openings (13) of the distribution body (11) by means of a distribution medium (12), wherein the distribution medium (12) comprises a netted

framework with passages (14) to distribute the process fluid and/or the electric current from the distribution body (11).