Claims

1. Ozone generator with a high voltage electrode and at least one counter electrode which limit a gap in which at least one dielectric and an electrically non-conductive structure are arranged and through which a stream of gas flows in a direction of flow, wherein the high voltage electrode and the at least one counter electrode are provided with a connection for an electrical voltage supply in order to generate silent discharges, and wherein the electrically non-conductive structure contains pores with a nominal pore size (x) within a range of 100 µ< x <1 mm, wherein the electrically non-conductive structure is a fabric.

2. Ozone generator according to claim 1, wherein the electrically non-conductive structure is a woven fabric or mesh.

3. Ozone generator according to any one of the preceding claims, wherein the electrically non-conductive structure is at least partially in planar contact with the at least one dielectric.

4. Ozone generator according to any one of the preceding claims, wherein the nominal pore size (x) is 100 µm< x <750 µm.

5. Ozone generator according to any one of the preceding claims, wherein the nominal pore size (x) is 100 µm< x <500 µm.

6. Ozone generator according to any one of the preceding claims, wherein the nominal pore size (x) is 100 µm< x <250 µm.

7. Ozone generator according to any one of the preceding claims, wherein the electrically non-conductive structure is made of ceramic and/or glass.

8. Ozone generator according to any one of the preceding claims, wherein the high voltage electrode is formed at least partially from a metallic fabric.

9. Electrically non-conductive structure for use in a gas flow of an ozone generator, wherein the electrically non-conductive structure contains pores with a nominal pore size (x) of 100 µm< x <1 mm, wherein the electrically non-conductive structure is a fabric made of glass fibre or ceramic fibre.

10. Electrically non-conductive structure according to claim 9, wherein the nominal pore size (x) is 100 µm< x <250 µm.