Claims

1. An ~~I~~insert~~ (4)~~ for a device~~ (1)~~ for treating cells, wherein said insert~~ (4)~~ comprises electrodes~~ (2a, 2b)~~ for emitting electric pulses and has an electrical connection ~~(4a)~~, **characterized in that** a treatment space~~ (3)~~ is provided in said insert~~ (4)~~, wherein said treatment space ~~(3)~~ can be penetrated by the electric pulses emitted by said electrodes~~ (2a, 2b)~~ and an electric field resulting therefrom.

2. The ~~I~~insert according to claim 1, **characterized in that** the insert~~ (4)~~ is a static insert.

3. The ~~I~~insert according to claim 1 or 2, **characterized in that** the treatment space~~ (3)~~ is a chamber at one end of the insert~~ (4)~~ and has an opening~~ (4b)~~.

4. The ~~I~~insert according to claim 1 or 2, **characterized in that** said treatment space~~ (3)~~ is an open area between the electrodes~~ (2a, 2b)~~ that are provided at one end of the insert~~ (4)~~.

5. The ~~I~~insert according to claim 3, **characterized in that** the electrodes~~ (2a, 2b)~~ are provided in said chamber.

6. A device~~ (1)~~, comprising an inlet~~ (6)~~ and an inner space ~~(7)~~, and further comprising an opening~~ (5)~~ and a unit~~ (2)~~ for generating electric pulses, **characterized in that** the device~~ (1)~~ further comprises the~~an~~ insert~~ (4)~~ according to any of claims 1 to 5, that can be inserted in said opening~~ (5)~~.

7. The device according to claim 6, **characterized in that** the insert ~~(4)~~ is electrically connected to the unit ~~(2)~~ for generating electric pulses via the electrical connection ~~(4a)~~ of said insert ~~(4)~~.

8. The device according to claim 6 or 7, **characterized in that** the device ~~(1)~~ further comprises a mixing unit ~~(9)~~.

9. The device according to claim 8, **characterized in that** the mixing unit ~~(9)~~ is connected to a motor ~~(10)~~.

10. The device according to any of claims 6 to 9, **characterized in that** the device ~~(1)~~ further comprises at least one additional sensor ~~(11)~~.

11. The device according to any of claims 6 to 10, **characterized in that** the treatment space ~~(3)~~ provided in said insert ~~(4)~~ has a volume that is in the range of 0.1% to 10%, preferably 1% to 5%, of the volume of the inner space ~~(7)~~ of said device ~~(1)~~.

12. The device according to any of claims 6 to 11, **characterized in that** the unit ~~(2)~~ for generating and emitting electric pulses can generate electric pulses so that a voltage increase take place between the two electrodes ~~(2a, 2b)~~ of 10% to 90% of a target voltage of the electric pulses within a period of 0.1 ns to 1000 ns, the electric pulses have a pulse duration of 5 ns to 50000 ns, and the electric pulses, upon reaching the target voltage, have an electric field strength of 0.5 kV/cm to 100 kV/cm.

13. A method for treating cells for stimulating cell growth, performed in the~~a~~ device~~ (1)~~ according to any one of claims 6 to 12, comprising the steps

a) introducing cell material through the inlet~~ (6)~~ of the device~~ (1)~~ into the inner space~~ (7)~~ of the device~~ (1)~~,

b) passing of the cell material into the treatment space~~ (3)~~ and subjecting it to the electric pulses penetrating the treatment space~~ (3)~~.

14. The method according to claim 13, **characterized in that** the cell material is provided in the inner space~~ (7)~~ of said device~~ (1)~~ as a suspension~~ (8)~~ in an electrically conductive liquid.

15. The method according to any one of claims 13 to 14, **characterized in that** an electric field is applied by said unit~~ (2)~~ for generating electric pulses with such electric pulses that a voltage increase takes place between the two electrodes~~ (2a, 2b)~~ of 10% to 90% of a target voltage of the electric pulses within a period of 0.1 ns to 1000 ns, the electric pulses have a pulse duration of 5 ns to 50000 ns, and the electric pulses, upon reaching the target voltage, have an electric field strength of 0.5 kV/cm to 100 kV/cm.