

Title (en)
ELECTROLYSIS CELL HAVING RESILIENT SUPPORT ELEMENTS

Title (de)
ELEKTROLYSEZELLE MIT FEDERNDEN HALTEELEMENTEN

Title (fr)
CELLULE ÉLECTROLYTIQUE MUNIE D'ÉLÉMENTS DE RETENUE ÉLASTIQUES

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Application
EP 19734703 A 20190612

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Abstract (en)
[origin: WO2019238780A1] The invention relates to an electrolysis cell comprising an anode chamber (22) and a cathode chamber (21) which are separated from one another by an ion-exchange membrane (23), wherein the electrolysis cell (10) also comprises an anode, a gas diffusion electrode and a cathode current distributor (13), wherein the anode (14), ion-exchange membrane (23), gas diffusion electrode (24) and cathode current distributor (13) are each in direct contact with one another in the stated order so as to touch and wherein flexibly resilient support elements (30) are arranged on the other side of the anode (14) and/or on the other side of the cathode current distributor (13) and exert a contact pressure on the anode and/or on the cathode current distributor, wherein, according to the invention, the flexibly resilient support elements (30) comprise annular elements or at least one tubular portion, the axis of which is oriented in the vertical direction of the electrolysis cell (10). Owing to the flexibly resilient annular elements or tubular portions, which also plastically deform at least in part, effective mechanical contact pressure of the ion-exchange membrane on the oxygen-consuming cathode is achieved in order to produce a zero gap configuration.

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