

Title (en)
OZONE GENERATING ELECTROLYSIS CELL

Title (de)
OZONERZEUGENDE ELEKTROLYSEZELLE

Title (fr)
CELLULE D'ÉLECTROLYSE PRODUISANT DE L'OZONE

Publication
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Application
EP 06831525 A 20061222

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Abstract (en)
[origin: US2008314740A1] The ozone generating electrolysis cell (10) according to the invention has a negative electrode (13) and an ozone generating positive electrode (16) comprising a mixture of lead dioxide and polytetrafluoroethylene (PTFE). A proton conducting solid electrolytic membrane (15) is arranged between the negative and positive electrodes (13, 16). The ozone generating electrolysis cell (10) also comprises an electrically conducting, liquid and gas permeable first electrode support (17) in contact with a side of the positive electrode (16) located opposite to the membrane (15), wherein said side of the electrode support (17) has a surface covered with a platinum-containing layer. The positive electrode (16) is made of a mixture prepared by the high-pressure compression of lead dioxide grains of colloid size and PTFE filaments having a dimension of at most 1 mm. Furthermore, the negative electrode (13) is adjoined to a side of the membrane (15) located opposite to the positive electrode (16) by a given compressing force and is formed on a surface of a porous second electrode support (12).

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