

a 2005 0320

The invention relates to electrochemistry, namely to processes for water decomposition by electrolysis.

The process provides the realization of the water electrolysis process during advancement of direct electric current through an electrolytic cell formed of electrodes which are not consumed. The ratio of the cell electrode areas is equal to or exceeds 10:1. The voltage applied to the cell's electrodes is smaller by value than the water decomposition theoretical voltage. The gas is released on the electrode with a smaller area, and the released gas type depends on the polarity of the voltage applied to the cell's electrodes.

Claims: 1