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The invention relates to the field of hydrogen and oxygen obtaining by electrolysis and may be used in the experimental work implementation plants, which require a minimum consumption of electric power.

The electrolytic cell is formed of chemically neutral electrodes in alkaline solution and is included into the circuit of a unidirectional electric current. The voltage applied to the cell's electrodes is smaller by value than the water decomposition theoretical voltage. The electric power is only consumed for ion migration in the solution and for their reduction up to molecules.

Claims: 1