

Title (en)

METHOD AND DEVICE FOR PRODUCING OXYGEN

Title (de)

VERFAHREN UND VORRICHTUNG ZUR ERZEUGUNG VON SAUERSTOFF

Title (fr)

PROCEDE ET DISPOSITIF DE PRODUCTION D'OXYGENE

Publication

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Application

EP 02750540 A 20020312

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Abstract (en)

[origin: WO02072919A2] The invention relates to a method and a device for producing elementary oxygen or for increasing the concentration thereof in the inhaled air of a user. According to the invention, water is split into hydrogen and elementary oxygen by means of electrical energy (electrolysis), the elementary oxygen is mixed with the inhaled air, and the hydrogen is mixed with the surrounding air in order to be converted back into water (fuel reaction). The splitting of the water into hydrogen and elementary oxygen and the conversion of the hydrogen and surrounding air into water take place simultaneously and continuously, forming a reaction circuit, and are coupled to each other, the electrical energy produced during the conversion being used to reduce the energy demand for the splitting. To this end, an electrolyzer outfit for splitting water into hydrogen and elementary oxygen, and a fuel cell for converting the hydrogen and the surrounding air into water are electrically connected in such a way that they can conduct liquids.

IPC 8 full level

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Citation (search report)

See references of WO 02072919A2

Cited by

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