

Title (en)

ELECTROLYTIC REACTION SYSTEM FOR PRODUCING GASEOUS HYDROGEN AND OXYGEN

Title (de)

ELEKTROLYTISCHES REAKTIONSSYSTEM ZUR ERZEUGUNG VON GASFÖRMIGEM WASSERSTOFF UND SAUERSTOFF

Title (fr)

SYSTÈME RÉACTIONNEL ÉLECTROLYTIQUE POUR PRODUIRE DE L'HYDROGÈNE ET DE L'OXYGÈNE GAZEUX

Publication

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Application

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Abstract (en)

[origin: WO2011038432A1] The invention relates to an electrolytic reaction system (1) for producing gaseous hydrogen and oxygen, comprising a reaction chamber (2) for accommodating an electrolyte and an electrode arrangement (3), which comprises a plurality of anodic and cathodic electrodes (5, 6). The electrode arrangement (3) comprises a plurality of plate-shaped electrodes (5, 6) that are fanned out in a star shape, wherein a virtual fanning axis (7) of the star-shaped electrode arrangement (3) lies at least approximately on a virtual central cylinder axis or vertical axis (8) or congruently with a virtual central cylinder axis or vertical axis (8) of the reaction chamber (2). In an axial direction of the virtual cylinder axis or vertical axis (8), at least one electromagnetic coil (13) is arranged above and/or below the star-shaped electrode arrangement (3). The electromagnetic field of the at least one electromagnetic coil acts on the electrolyte and on the electrode arrangement (3) when exposed to electrical energy. According to another embodiment, the electrode arrangement (3) comprises at least two, preferably more than at least three, tubular electrodes arranged coaxially or approximately coaxially in one another. Thus, an improved, in particular especially efficient electrolytic reaction system (1) is achieved.

IPC 8 full level

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See references of WO 2011038432A1

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