

Title (en)

BIPOLAR PLATE HAVING A VARIABLE WIDTH OF THE REACTION CHANNELS IN THE INLET REGION OF THE ACTIVE REGION, FUEL CELL STACK AND FUEL CELL SYSTEM HAVING BIPOLAR PLATES OF THIS TYPE, AS WELL AS A VEHICLE

Title (de)

BIPOLARPLATTE MIT VARIABLER BREITE DER REAKTIONSGASKANÄLE IM EINTRITTSBEREICH DES AKTIVEN BEREICHS, BRENNSTOFFZELLENSTAPEL UND BRENNSTOFFZELLENSYSTEM MIT SOLCHEN BIPOLARPLATTEN SOWIE FAHRZEUG

Title (fr)

PLAQUE BIPOLAIRE À LARGEUR VARIABLE DES CANAUX À GAZ DE RÉACTION DANS LA ZONE D'ENTRÉE DE LA ZONE ACTIVE, EMPILEMENT DE CELLULES À COMBUSTIBLE ET SYSTÈME DE CELLULES À COMBUSTIBLE COMPORTANT DE TELLES PLAQUES BIPOLAIRES ET VÉHICULE

Publication

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Application

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Abstract (en)

[origin: WO2017220552A1] In order to provide a bipolar plate (10) for a fuel cell having two profiled separator plates (12, 14) designed in such a way that the bipolar plate (10) has separate channels (28, 30, 32) for the reaction gases and the coolant, wherein the gas composition is incorporated in the active region, according to the invention, the channels (28, 32) for a reaction gas or both reaction gases have a smaller width (B2) in an inlet region (34) of the active region (16) than in the remaining sub-region (36) of the active region (16), wherein the width (B2) thereof continuously increases from the beginning to the end of the inlet region (34), while supports (54) between the channels (28, 32) have a greater width (B1) than in the remaining sub-region (36) of the active region (16), wherein the sum of the width (B2) of the channels and the width (B1) of the supports (54) is constant, and the width (B2, B2) of the channels (28, 32) and the supports (54) is constant in the entire remaining sub-region (36). The invention also relates to a fuel cell stack, a fuel cell system and a vehicle.

IPC 8 full level

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