

Title (en)
BASE PANEL MATERIAL FOR USE AS HEAT EXCHANGE PLATE AND METHOD FOR MANUFACTURING SUCH BASE PANEL MATERIAL

Title (de)
GRUNDPLATTENMATERIAL ZUR VERWENDUNG ALS WÄRMETAUSCHERPLATTE UND VERFAHREN ZUR HERSTELLUNG SOLCH EINES GRUNDPLATTENMATERIALS

Title (fr)
MATÉRIAU DE PANNEAU DE BASE DESTINÉ À ÊTRE UTILISÉ COMME PLAQUE D'ÉCHANGE DE CHALEUR ET PROCÉDÉ DE FABRICATION DUDIT MATÉRIAU DE PANNEAU DE BASE

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Application
EP 15755314 A 20150219

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Abstract (en)
[origin: EP3104109A1] The object of the invention is to provide: a plate for a heat-exchanging plate that allows a liquid film generated during the operation of a heat exchanger to be efficiently discharged, allows irregularities to be formed such that the thickness of the liquid film is reduced, and allows enhancing heat-transfer performance without collapse of the irregularities; and a method for producing the plate. A plate (1) for a heat-exchanging plate is constituted by a metallic flat plate having fine irregularities formed on a surface thereof, and is obtained through press working, which is implemented as a post-process, of the flat plate. The irregularities include a plurality of projections (2) formed at a predetermined spacing. The plurality of projections (2) include first ridges (2a) disposed at an angle α , with respect to the width direction of the plate (1), and second ridges (2b) disposed at an angle β , with respect to the width direction of the plate (1). The projections (2) are formed into V-shapes by the first ridges (2a) and the second ridges (2b).

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Citation (search report)
• [X] JP 2004183916 A 20040702 - MIZUI SOICHI
• [X] US 2006264073 A1 20061123 - YANG CHIEN-YUH [TW], et al
• [X] US 2005081379 A1 20050421 - ASKANI HANS [DE], et al
• [X] US 3631923 A 19720104 - IZEKI HAZIME

Cited by
EP3696487A4

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DOCDB simple family (application)
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