

Title (en)
REGENERATOR, AND HEAT REGENERATIVE SYSTEM FOR FLUIDIZED GAS USING THE REGENERATOR

Title (de)
REGENERATOR UND REGENERATIV-WÄRMESYSTEM FÜR FLUIDISIERTES GAS UNTER VERWENDUNG DES REGENERATORS

Title (fr)
REGENERATEUR, ET SYSTEME DE REGENERATION THERMIQUE POUR GAZ FLUIDISE METTANT EN OEUVRE UN TEL REGENERATEUR

Publication
EP 1422484 B1 20060111 (EN)

Application
EP 02796355 A 20020821

Priority
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Abstract (en)
[origin: EP1422484A1] In a regenerator 1, on the surface of a strip-shaped resin film 2, a resin layer 3 containing an ingredient having higher thermal conductivity than the resin film 2 is formed; or, over a predetermined width from an edge of the regenerator 1, a resin coating 4 is formed. Then, the resin film 2 is rolled into a cylindrical shape to produce the cylindrical regenerator 1. In a flow gas heat regeneration system having the regenerator 1 disposed in a doughnut-shaped space, when a hot working gas flows into the regenerator 1 through one end thereof, the heat of the working gas is stored in the resin film 2. Here, the resin layer 3 or resin coating 4 on the resin film 2 enhances heat conduction in the regenerator. Thus, more heat is stored in the resin film 2. When the cold working gas flows into the regenerator 1 through the other end thereof, the heat stored in the resin film 2 is rejected to the working gas. Here, the resin layer 3 or resin coating 4 on the resin film 2 enhances heat conduction in the regenerator 1 and increases the heat capacity thereof. Thus, more heat is rejected to the working gas. In this way, it is possible to achieve high heat energy regeneration efficiency. <IMAGE>

IPC 8 full level
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