

Title (en)

SEG-LOK BAFFLE FOR HEAT EXCHANGER

Title (de)

SEG-LOK-LEITBLECH FÜR WÄRMETAUSCHER

Title (fr)

DÉFLECTEUR SEG-LOK POUR ÉCHANGEUR DE CHALEUR

Publication

EP 4090902 A1 20221123 (EN)

Application

EP 21700456 A 20210108

Priority

- US 202062960720 P 20200114
- IB 2021050131 W 20210108

Abstract (en)

[origin: WO2021144671A1] A baffle system and heat-exchange apparatus generally comprising a plurality of baffles and a plurality of tubes, wherein the plurality of baffles define at least one permeable support region and at least one barrier region. The at least one permeable support region can permit shell-side fluid to pass through the baffles and flow along the lengths of the tubes generally unimpeded and thereby prevent excessive shell-side pressure drop. The at least one barrier region can create turbulence in the flow of the shell-side fluid surrounding the plurality of tubes and prevent stratification. The combination of the permeable support region and barrier region within the baffle system or heat-exchange apparatus can yield a swirl flow that can reduce excessive shell-side pressure drop, reduce stratification in the flow of the shell-side fluid, and promote the efficiency of heat transfer between tube-side fluid and shell-side fluid.

IPC 8 full level

F28F 9/22 (2006.01)

CPC (source: EP KR US)

F28D 7/16 (2013.01 - KR); **F28D 7/1607** (2013.01 - US); **F28F 9/0131** (2013.01 - EP KR US); **F28F 9/22** (2013.01 - EP KR US);
F28D 7/16 (2013.01 - EP); **F28F 2009/226** (2013.01 - EP KR US)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

WO 2021144671 A1 20210722; CA 3160610 A1 20210722; CN 114981610 A 20220830; EP 4090902 A1 20221123; EP 4090902 B1 20240327;
EP 4090902 C0 20240327; KR 20220124163 A 20220913; US 2023056350 A1 20230223

DOCDB simple family (application)

IB 2021050131 W 20210108; CA 3160610 A 20210108; CN 202180008809 A 20210108; EP 21700456 A 20210108;
KR 20227022191 A 20210108; US 202117792417 A 20210108