

Title (en)  
HEAT EXCHANGER

Title (de)  
WÄRMETAUSCHER

Title (fr)  
ÉCHANGEUR DE CHALEUR

Publication  
**EP 4107461 A1 20221228 (EN)**

Application  
**EP 21703890 A 20210205**

Priority  
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• EP 2021052743 W 20210205

Abstract (en)  
[origin: GB2592221A] A shell and tube type heat exchanger 1 comprising a shell 2 and a tube arrangement 5 located within the shell. The tube arrangement has a flow tube 6, 8 that furcates at a plurality of nodes along its length and may further furcate into sub-tubes 18, 19 at these aligned nodes in a fractal or quasi-fractal form. The shell and tube type heat exchanger further comprise a tube matrix 13 fluidly coupled to the flow tube; the tube matrix being made of parallel tubes. The heat exchanger may feature a plurality of tube modules 9 that are formed into a ring structure with an aperture through the centre of the ring, with a plug 16 provided in the aperture.

IPC 8 full level  
**F28D 7/16** (2006.01); **B64D 33/08** (2006.01)

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