

Title (en)  
INTERMEDIATE HEAT EXCHANGER FOR NUCLEAR REACTOR WITH FAST NEUTRONS

Publication  
**EP 0036347 B1 19840516 (FR)**

Application  
**EP 81400280 A 19810223**

Priority  
FR 8005172 A 19800307

Abstract (en)  
[origin: EP0036347A1] 1. Intermediate heat exchanger comprising an inner cylindrical sheel (5) having a vertical axis, an outer shell (6) coaxial with the inner shell (5), two horizontal annular tube plates (7, 8) located near the upper and lower ends of said shells, a bundle of straight tubes (9) extending between the tube plates in cylindrical layers coaxial with the shells, said layers being mutually braced by transverse anti-vibration girdles (10) formed by horizontal belts (19) carrying cylindrical elements (20) lodged between, and in contact with, the tubes (9) of the layers, inlet (12) and outlet manifolds (14) for a secondary fluid circulating within the tubes (9) being provided respectively below the lower plate (8) and above the upper plate (7), the inner shell (5) forming an inlet conduit to the inlet manifold for the secondary fluid while the outer shell (6) is upwardly prolonged as an outlet conduit (15) for the same fluid collected in the outlet manifold after passage through the tubes, at least one inlet port (17) and at least one outlet port (18), in the outer shell (6), and near the tube plates, for the input and output of a primary fluid in indirect heat exchange with the secondary fluid through the walls of tubes (9), characterized in that said exchanger comprises an horizontal annular plate (22) forming a baffle located immediately below said inlet port (17), and occupying only a part of the horizontal area of the space limited by said inner (5) and outer shells (6), said plate (22) having a plurality of orifices (26, 26', 29) intended, on the one hand, for the passage of tubes (9) of the bundle and, on the other hand, for the circulation of part of the primary fluid.

IPC 1-7  
**F28F 9/22**; **F28D 7/00**; **F22B 1/06**

IPC 8 full level  
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CPC (source: EP)  
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Cited by  
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DE GB IT

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