

Title (en)
Multitubular heat exchanger

Title (de)
Wärmetauscher mit mehreren Rohrleitungen

Title (fr)
Échangeur thermique à plusieurs tubes

Publication
EP 2469211 A2 20120627 (EN)

Application
EP 11195749 A 20111227

Priority
JP 2010290129 A 20101227

Abstract (en)
Provided is a heat exchanger including a plurality of inner tubes (114) through which a first fluid passes and an outer tube (117) through which a second fluid passes, the inner tubes (114) including thick tube portions (114a) at both ends, a thin tube portion (114b) at the middle, and a tapered tube portion (114c) between the thin tube portion (114b) and the thick tube portion (114a). Provided is a multitubular heat exchanger for which the inner tubes (114) are in sealed contact at the thick tube portions (114a) and held and integrated by the outer tube (117), so that a second fluid pass-through gap (S) is formed between the outside of each inner tube (114) and the inside of the outer tube (117). The inner tube (114) is tapered at one side in the upper and lower direction of the tapered tube portion (114c), and its surface (bottom surface) to be on the downside when the inner tube (114) is used is provided as a longitudinal flat surface. Thus, the multitubular heat exchanger according to the present invention does not allow forming between the thick tube portion (114a) and the tapered tube portion (114c) a recess portion forming a condensed water pool in the heat exchanger when used.

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Citation (applicant)
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EP3273197A1; US2016223272A1; US9995540B2; US9909475B2

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