

Title (en)
HEAT EXCHANGER

Title (de)
WÄRMETAUSCHER

Title (fr)
ÉCHANGEUR DE CHALEUR

Publication
EP 3399268 A1 20181107 (EN)

Application
EP 15912102 A 20151228

Priority
JP 2015086562 W 20151228

Abstract (en)
Wave-like concaves/ convexes 34 and 36 are formed on respective flat surfaces 33 and 35 of a heat exchange tube 30, such that crest lines 34a and 36a of continuing V shapes in a horizontal direction and trough lines 34b and 36b of continuing V shapes in the horizontal direction are alternately arranged and that bends of the V shapes form curve lines. This configuration reduces the stress concentration at the bends in a press-forming process, compared with a configuration that crest lines and trough lines have bends formed in a shape of continuing sharply-angled V shapes in the horizontal direction. As a result, this configuration increases the yield in the press-forming process at a fixed amplitude of the wave-like concaves/ convexes 34 and 36 and increases the amplitude of the wave-like concaves/ convexes 34 and 36 at a fixed yield in the press-forming process.

IPC 8 full level
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F28D 9/0006 (2013.01 - EP US); **F28D 9/0043** (2013.01 - EP US); **F28F 1/06** (2013.01 - EP US); **F28F 1/08** (2013.01 - EP US); **F28F 1/12** (2013.01 - US); **F28F 1/34** (2013.01 - EP US); **F28F 3/04** (2013.01 - EP US); **F28F 3/046** (2013.01 - EP US); **F28D 1/05358** (2013.01 - EP US); **F28F 1/04** (2013.01 - EP US); **F28F 1/126** (2013.01 - EP US); **F28F 1/26** (2013.01 - EP US); **F28F 1/422** (2013.01 - EP US)

Designated contracting state (EPC)
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