

Title (en)

METHOD FOR DETERMINING A CONFIGURATION OF A HEAT EXCHANGER

Title (de)

VERFAHREN ZUR BESTIMMUNG EINER KONFIGURATION EINES WÄRMETAUSCHERS

Title (fr)

PROCÉDÉ DE DÉTERMINATION D'UNE CONFIGURATION D'UN ÉCHANGEUR DE CHALEUR

Publication

**EP 2613116 A1 20130710 (EN)**

Application

**EP 11821559 A 20110817**

Priority

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- JP 2011068610 W 20110817

Abstract (en)

Provided is a heat exchanger whose air pressure loss is small and whose exchanged heat is large. The heat exchanger includes flat tubes, each having therein a plurality of refrigerant circulation holes, and fins fixed to the flat surfaces of the flat tubes, wherein the flat tubes and the fins are alternately stacked to form the heat exchanger.  $(W - t_1 - t_2) \times H_p \times H_f / N$  is set to 3.95 or greater and 10.0 or less, where  $d_e$  is the equivalent diameter of the plurality of the refrigerant circulation holes,  $W$  is the width of each of the flat tubes,  $t_1$  is the wall thickness of each of the flat tubes at one end in the widthwise direction corresponding to the distance from the refrigerant circulation hole closest to the one end,  $t_2$  is the wall thickness of each of the flat tubes at the other end in the widthwise direction corresponding to the distance from the refrigerant circulation hole closest to the other end,  $H_p$  is the height of each of the flat tubes in the stacking direction,  $H_f$  is the height of the fins in the stacking direction, and  $N$  is the number of the refrigerant circulation holes, and the equivalent diameter  $d_e$  is set to 0.5 or more and 0.8 or less, and the flat tube width  $W$  is set to 12 mm or more and 16 mm or less.

IPC 8 full level

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