

Title (en)  
HEAT EXCHANGER

Title (de)  
WÄRMETAUSCHER

Title (fr)  
ECHANGEUR THERMIQUE

Publication  
**EP 0859209 A1 19980819 (EN)**

Application  
**EP 97937831 A 19970828**

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• JP 9703010 W 19970828  
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• JP 35166596 A 19961227

Abstract (en)  
A heat exchanger 1 including a pair of tanks, 2, 2, and a plurality of tubes 4, 4 and fins 3a, 3a disposed between tanks 2, 2, wherein each tube 4 includes a sealed section 5 at the midpoint to divide a passage into two passages 6, 7. Thus, one passage on one side is formed in a U-shape and connected to the tank 2 on one side, and the other passage on the other side is formed in the U-shape and connected to the tank 2 on the other side, thereby the U-shaped passage and the tank on one side form a first heat exchanger A having a single tank structure, and the other U-shaped passage and the other tank on the other side form a second heat exchanger having the single tank structure. A heat insulation region 11 without a fin is formed between the first and second heat exchangers. The first and second heat exchangers are integrally brazed to form a heat exchanger, wherein each tube 4 is formed by folding a single plate into halves or joining two plates made of an aluminum material or aluminum alloy with both faces clad with a brazing material, and the sealed section 5 is formed to divide the passage into two passages in a longitudinal direction of the tube.  
<IMAGE>

IPC 1-7  
**F28D 1/053; F28F 9/02**

IPC 8 full level  
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