

Title (en)

Heat exchanger having integral elastic regions

Title (de)

Wärmetauscher mit eingebauten elastischen Bereichen

Title (fr)

Echangeur thermique ayant des régions élastiques intégrales

Publication

EP 1878990 A1 20080116 (EN)

Application

EP 07013679 A 20070712

Priority

US 83023206 P 20060712

Abstract (en)

The invention provides, among other things, a heat exchanger including a header (18), a number of tubes (11) extending outwardly from the header, and an elastic sleeve (15) supported between the header (18) and one of the tubes (11) to allow movement of the tube (11) relative to the header in a direction substantially parallel to a length of the tube defined between a first end of the tube adjacent to the header and a second end of the tube spaced away from the header. Together, the tube, the header, and the elastic sleeve can at least partially define a flow path for a working fluid.

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

- [X] US 1882085 A 19321011 - NELSON RICHARD H
- [X] GB 1571280 A 19800709 - SERA HUSSON SOC D ETUDES ET RE
- [X] US 3527291 A 19700908 - NEARY ROBERT J, et al
- [X] WO 9911421 A1 19990311 - TRANSPRO INC [US]
- [X] US 2413360 A 19461231 - MAGUIRE WALTER R, et al

Cited by

EP2562505A1; EP2075522A1; EP3222842A1; ITCO20110033A1; GB2529726A; GB2529726B; US11255609B2; US9863723B2

Designated contracting state (EPC)

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