Title (en)
Supporting structural framework for a tubular heat exchanger

Title (de)
Stützrahmenanordnung für einen Rohrwärmeübertrager

Title (fr)
Châssis de support pour les tubes d'un échangeur de chaleur

Publication
EP 2088371 A2 20090812 (EN)

Application
EP 07252836 A 20070718

Priority
EP 07252836 A 20070718

Abstract (en)
A structural framework (39) for supporting the heat exchanger (26) of a steam generator (10), the former being comprised of serpentine tubes (28) having sloped segments (30) to facilitate the drainage of water from the heat exchanger (26) when the steam generator (10) is shutdown. The structural framework (39) includes paired groups of vertically and diagonally extending first support members (35) contiguously straddling the sloped-tube segments (30). The paired first support members (35) are rigidly connected by second support members (38) which extend between adjacent sloped-tube segments (30). The structural framework (39) preserves the spacing between the sloped-tube segments (30) and prevents direct contact between adjoining tube surfaces, but is not attached to the straddled tube segments and, thus, provides a tube supporting fit that is loose enough to permit the tubes (28) to move freely due to expansion and contraction at different rates from that of the structural framework (39).

IPC 8 full level
F22B 37/20 (2006.01); F22G 7/14 (2006.01); F28D 7/08 (2006.01); F28F 9/013 (2006.01)

CPC (source: EP)
F22B 37/202 (2013.01); F22B 37/205 (2013.01); F28D 7/08 (2013.01); F28F 9/0136 (2013.01)

Cited by
CN102250659A; CN109695866A; CN102261641A; EP2960614A4; CN109395691A; US10378835B2; US9835380B2; US10006369B2; US9777963B2

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA HR MK RS

DOCDB simple family (publication)
EP 2088371 A2 20090812; EP 2088371 A3 20090819; EP 2088371 B1 20140521; DK 2088371 T3 20140804; ES 2488852 T3 20140829; PL 2088371 T3 20141031; PT 2088371 E 20140804

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EP 07252836 A 20070718; DK 07252836 T 20070718; ES 07252836 T 20070718; PL 07252836 T 20070718; PT 07252836 T 20070718