

Title (en)

HEAT EXCHANGER COMPRISING A BUNDLE OF TUBES OPENING INTO COLLECTOR PANELS MECHANICALLY ASSOCIATED WITH WATER VESSELS

Publication

EP 0028951 B1 19821215 (FR)

Application

EP 80401487 A 19801020

Priority

FR 7927789 A 19791112

Abstract (en)

[origin: ES254362U] The heat exchanger comprises a core of tubes engaged into tubes plates defining a peripheral groove bounded outwardly by a raised edge with a sealing gasket being placed in the bottom of the groove in order to be clamped by under side of an edge of a header box maintained by gripping means. The header box is thin walled and the edge of said header box has a top portion with a small bar interposed between said top portion and said gripping means.

IPC 1-7

F28F 9/02

IPC 8 full level

F28D 1/053 (2006.01); **F28F 9/02** (2006.01)

CPC (source: EP US)

F28D 1/0535 (2013.01 - EP US); **F28F 9/0226** (2013.01 - EP US); **F28F 2275/122** (2013.01 - EP US); **Y10S 165/474** (2013.01 - EP US)

Citation (examination)

- GB 699032 A 19531028 - COVENTRY RADIATOR & PRESSWORK
- FR 2270471 A1 19751205 - CHAUSSON USINES SA [FR]

Cited by

US4651815A; US4707905A; US4461348A; US4645002A

Designated contracting state (EPC)

BE DE GB IT NL SE

DOCDB simple family (publication)

EP 0028951 A2 19810520; **EP 0028951 A3 19810527**; **EP 0028951 B1 19821215**; BR 8007268 A 19810519; DE 3061362 D1 19830120; ES 254362 U 19810416; ES 254362 Y 19811101; FR 2469686 A1 19810522; FR 2469686 B1 19840427; JP S5682393 A 19810706; US 4324290 A 19820413

DOCDB simple family (application)

EP 80401487 A 19801020; BR 8007268 A 19801107; DE 3061362 T 19801020; ES 254362 U 19801112; FR 7927789 A 19791112; JP 15777580 A 19801111; US 20098680 A 19801027