

Title (en)

PROCESS AND APPARATUS FOR ELECTROPOLISHING THE INTERNAL SURFACES OF U-SHAPED HEAT EXCHANGER PIPES

Publication

EP 0171717 B1 19881102 (DE)

Application

EP 85109706 A 19850802

Priority

DE 3430384 A 19840817

Abstract (en)

[origin: ES8700339A1] Method for electropolishing the inner surface of an U-shaped heat exchanger tube with an electrode connected to a negative pole of a d-c voltage source, the electrode being slidable into the heat exchanger tube and withdrawable out of the tube by a pulling member, and with a pump connected to an electrolyte tank for feeding electrolyte into the heat exchanger tube, which comprises inserting into two chambers, respectively, formed in a bottom hemispherical shell of a heat exchanger, respective manipulators formed with jibs for positioning tube probes by remote control into end openings of U-shaped heat exchanger tubes disposed in the heat exchanger and opening into the chambers pressing by the manipulators respective adapters, which are connected to hose connectors and are carried at respective free ends of the manipulator jibs, to the end openings of the heat exchanger tubes through the intermediary of respective seals so as to align in each of the chambers the end opening of one of the U-shaped heat exchanger tubes with respective hoses connected thereto by the hose connectors inserting an electrode by a thrust cable through one of the hoses and into the respective heat exchanger tube up to a given location therein pumping electrolyte through one of the hoses into the respective heat exchanger tube and conducting it from the other hose into a collecting tray electrically energizing the electrode and withdrawing it slowly from the respective heat exchanger tube while the electrode remains energized and thereafter removing the electrolyte from the respective heat exchanger tube.

IPC 1-7

C25F 3/16; **C25F 7/00**; **G21F 9/00**

IPC 8 full level

C25F 3/16 (2006.01); **C25F 7/00** (2006.01); **F22B 37/00** (2006.01); **G21F 9/00** (2006.01)

CPC (source: EP US)

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Cited by

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