Title (en)

SYSTEM, METHOD AND TUBE ASSEMBLY FOR HEATING AUTOMOTIVE FLUIDS

Title (de)

SYSTEM, VERFAHREN UND ROHRANORDNUNG ZUR ERWÄRMUNG VON AUTOFLÜSSIGKEITEN

Title (fr)

SYSTEME, PROCEDE ET ENSEMBLE TUYAU POUR CHAUFFER DES FLUIDES D'AUTOMOBILE

Publication

EP 1856441 A2 20071121 (EN)

Application

EP 06735320 A 20060217

Priority

- US 2006005600 W 20060217
- US 65470105 P 20050221

Abstract (en)

[origin: WO2006091477A2] A tube heating assembly having a heating tube with proximate and distal end portions, a manifold insert disposed concentrically within the heating tube and likewise having proximate and distal end portions/ and a pair of end caps removably secured to the proximate and distal end portions of the manifold insert and the heating tube respectively. The manifold insert includes a raised spiral thread on its surface. An electrical assembly such as a resistive path applied to the outer surface of the heating tube is used to heat the tube. The tube heating assembly may be embodied in a system and method for delivering an automotive fluid in a vehicle, wherein the tube heating assembly is installed as a heat exchanger in a fluid delivery path through which the fluid is pumped, preferably in pulses to enhance heating of the fluid.

IPC 8 full level

F22B 37/00 (2006.01)

CPC (source: EP US)

B60S 1/488 (2013.01 - EP US); **F02M 31/005** (2013.01 - EP US); **F02M 31/12** (2013.01 - EP US); **F16L 53/38** (2017.12 - EP US); Y02T 10/12 (2013.01 - EP US)

Citation (search report)

See references of WO 2006091477A2

Designated contracting state (EPC)

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