

Title (en)
Self-pumping heat exchange unit

Title (de)
Selbstpumpende Wärmetauschereinheit

Title (fr)
Unité d'échange de chaleur à pompage automatique

Publication
EP 2759796 B1 20190605 (EN)

Application
EP 14382024 A 20140127

Priority
ES 201330088 A 20130125

Abstract (en)
[origin: EP2759796A2] In addition to efficiently removing residues from the inner wall of the inner tubes (20), reducing head loss and substantially improving the heat transfer coefficient, the present invention also allows obtaining different pumping flow rates for the product fluid. More particularly, the heat exchange unit (1) stands out because it comprises an elongated rotary rod (30) arranged inside at least one inner tube (20) and provided with cleaning means comprising scraping elements (40) suitable for scraping and detaching the product fluid accumulated on the inner wall of the at least one inner tube (20); and an endless spiral (50) dimensionally suitable for surrounding the rotary rod (30) longitudinally through the spaces existing between the scraping elements (40), said endless spiral (50) being suitable for displacement of the product fluid circulating through the at least one inner tube (20), generating a self-pumping effect.

IPC 8 full level
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F28G 3/10 (2013.01 - EP ES US); **F28D 2021/0042** (2013.01 - EP); **F28F 2250/08** (2013.01 - EP US)

Cited by
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