

Title (en)

Scroll type device including compressor and expander functions in a single scroll plate pair

Title (de)

Spiralförmige Vorrichtung mit Kompressions- und Erweiterungsfunktionen in einem einzigen Spiralplattenpaar

Title (fr)

Dispositif de type à spirale incluant les fonctions de compresseur et de détendeur dans une seule paire de plaques de défilement

Publication

**EP 2693057 A3 20141001 (EN)**

Application

**EP 13003663 A 20130722**

Priority

US 201213507779 A 20120730

Abstract (en)

[origin: EP2693057A2] A scroll type device for operating on a fluid provided thereto that includes, as a unit, a housing (102) with two interleaved scroll plates (104,106) that are installed within such housing (102) and that are operably movable relative to one another in an eccentric orbit, with such scroll plates (104,106) including interleaved spiral projections on facing sides thereof, each of which spiral projections includes first and second portions, with the first spiral portion forming an inner involute spiral that spirals outwardly from the center in one spiral direction to an intermediate spiral point (142) located intermediately between the center and the outer limit of the scroll plate and a second spiral portion forming an outer involute spiral wrap that spirals outwardly from the intermediate spiral point (142) in the opposite, or counter, direction from that of the inner involute spiral to an outer spiral point (144) near the outer limit of the scroll plate, one of which portions will operate for expansion and the other of which portions will operate for compression as the unit operates in a given normal direction of movement.

IPC 8 full level

**F04C 18/02** (2006.01); **F01C 1/02** (2006.01); **F04C 23/00** (2006.01)

CPC (source: EP)

**F01C 1/0215** (2013.01); **F04C 18/0215** (2013.01); **F04C 18/0269** (2013.01); **F04C 23/001** (2013.01)

Citation (search report)

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- [YA] WO 2009050126 A1 20090423 - ENEFTECH INNOVATION SA [CH], et al
- [YA] US 4082484 A 19780404 - MCCULLOUGH JOHN E
- [A] US 2006130495 A1 20060622 - DIECKMANN JOHN T [US], et al
- [A] JP H07324688 A 19951212 - DAIKIN IND LTD

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**EP 2693057 A2 20140205; EP 2693057 A3 20141001**

DOCDB simple family (application)

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