

Title (en)
SCROLL FLUID MACHINE

Title (de)
SPIRALFLUIDMASCHINE

Title (fr)
MACHINE HYDRAULIQUE À SPIRALE

Publication
EP 3751143 A4 20210421 (EN)

Application
EP 19758318 A 20190206

Priority
• JP 2018028957 A 20180221
• JP 2019004254 W 20190206

Abstract (en)
[origin: EP3751143A1] The present invention is to provide a scroll fluid machine capable of reliably introducing an intermediate-pressure refrigerant during a compression process and improving the efficiency of a compressor. A scroll compressor (1) includes a fixed scroll (18) and an orbiting scroll (19); after sealing of a compression chamber (20) is started, a first region is set in which a volume change of the compression chamber (20) is gradual or substantially constant; a wall body (18b) and a wall body (19b) include a first wall-body inclined part in which heights of the wall bodies (18b) and (19b) continuously increase from an outer peripheral side to an inner peripheral side in a spiral direction; an end plate (18a) and an end plate (19a) include a first end-plate inclined part in which a tooth bottom opposite to a tooth tip of the first wall-body inclined part is inclined according to an inclination of the first wall-body inclined part; and at least a part of the first region is set by positions and shapes of the first wall-body inclined part and the first end-plate inclined part.

IPC 8 full level
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CPC (source: EP)
F04C 18/0215 (2013.01); **F04C 18/0276** (2013.01); **F04C 29/042** (2013.01)

Citation (search report)
• [A] US 4457674 A 19840703 - KAWANO AKIHIRO [JP], et al
• See references of WO 2019163516A1

Cited by
EP4219947A3

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 3751143 A1 20201216; EP 3751143 A4 20210421; EP 3751143 B1 20220302; JP 2019143548 A 20190829; JP 7134641 B2 20220912; WO 2019163516 A1 20190829

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