

Title (en)
SCROLL COMPRESSOR

Title (de)
SPIRALVERDICHTER

Title (fr)
COMPRESSEUR À VOLUTE

Publication
EP 2541066 A1 20130102 (EN)

Application
EP 10846543 A 20100226

Priority
JP 2010053143 W 20100226

Abstract (en)
[Problem] To provide a scroll compressor that can be easily mass-produced as a compact and lightweight structure at a low cost, and in which efficient low-capacity control is possible in a super-low speed operation mode. [Means for Resolution] In the compressor, a discharge guide pipe 120 that guides a refrigerant gas in a discharge head space 123 within a discharge head cover 118, which is disposed on a top plate of a fixed scroll 102 equipped with a release mechanism on an outer circumference of a discharge port 108, from the space 123 to the outside of a sealed case 115, and a suction pipe 113 for sucking in the refrigerant gas are coupled to each other and communicated with each other by a solenoid valve 122 whose opening and closing are controlled in accordance with a pulse-width modulation control signal, and a bypass passage that guides the refrigerant gas within the space 123 from the guide pipe 120 to the suction pipe 113 is formed. When low-capacity control is required in a low-speed rotation range, a motor 100 is driven by an inverter 128 and an operation is performed in which the ratio between the operation for closing the valve 122 and the operation for opening the valve 122 in accordance with the pulse-width modulation control signal from a solenoid drive circuit 129 has been altered.

IPC 8 full level
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CPC (source: EP)
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Cited by
US2015159649A1; US10047746B2; EP3339646A1; EP3354901A1; US10563891B2

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