

Title (en)
SCROLL COMPRESSOR

Title (de)
SPIRALVERDICHTER

Title (fr)
COMPRESSEUR À SPIRALE

Publication
EP 2679823 A1 20140101 (EN)

Application
EP 11859605 A 20110222

Priority
JP 2011053841 W 20110222

Abstract (en)
A scroll compressor is provided with a fixed scroll 5 and an orbiting scroll 6 meshed with each other to form a compression room 11, the fixed scroll having a release port 5e with a discharge outlet formed toward the central part and causing the compression room and the discharge side to communicate with each other on the outer circumferential side and a release valve 5a for preventing a reverse flow from the discharge side toward the compression room, and on the outer circumferential side of the fixed scroll a suction room 10 and a suction passage 5h. Further in the fixed scroll, a bypass passage 5f that causes the discharge side to communicate with the suction room or the suction passage is formed, and a bypass valve 14 for opening and closing the bypass passage is provided. Farther upstream than the suction room or the suction passage into which the bypass passage opens, a suction non-return valve 15 to prevent flowing back to the upstream side is disposed. In this way, highly efficient capacity control can be realized even under a light load operating condition by improving the delay in the discharge of the refrigerant to the discharge side when capacity-controlled operation is switched over to normal operation.

IPC 8 full level
F04C 18/02 (2006.01)

CPC (source: EP)
F04C 18/0215 (2013.01); **F04C 28/26** (2013.01); **F04C 29/126** (2013.01); **F04C 23/008** (2013.01)

Citation (search report)
See references of WO 2012114455A1

Cited by
CN105697369A; EP3339646A1; US10533555B2; US9869315B2

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