

Title (en)
VARIABLE-CAPACITY CYLINDER WITH SLIDING VANE CONTROL STRUCTURE AND VARIABLE-CAPACITY COMPRESSOR

Title (de)
ZYLINDER MIT VARIABLER KAPAZITÄT MIT GLEITSCHIEBERSTEUERUNGSSTRUKTUR UND VERDICHTER MIT VARIABLER KAPAZITÄT

Title (fr)
CYLINDRE À CAPACITÉ VARIABLE À STRUCTURE DE COMMANDE DE PALETTE COULISSANTE ET COMPRESSEUR À CAPACITÉ VARIABLE

Publication
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Application
EP 16874597 A 20160914

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• CN 2016099111 W 20160914

Abstract (en)
[origin: EP3392507A1] Provided is a sliding vane control structure for a variable-capacity cylinder, including a pin (113, 213) provided on a lower side of a sliding vane (11), the pin (113, 213) having a first position capable of stopping the sliding vane (11) and a second position capable of being separated from the sliding vane (11), wherein a low-pressure passage (115, 215) is provided under the pin (113, 213); and a surface seal structure is provided between the pin (113, 213) and the low-pressure passage (115, 215), and when the pin (113, 213) is at the second position, a surface seal is formed at a lower end of the pin (113, 213). Since the sliding vane control structure is provided with a surface seal structure, a seal effect of the surface seal is much better than that of a clearance seal, thereby greatly reducing a leakage of a refrigerant. Consequently, an efficiency of a compressor is increased when a variable-capacity cylinder is in a working mode, and a performance of the compressor is optimized. Also provided is the variable-capacity cylinder with the sliding vane control structure and a variable-capacity compressor.

IPC 8 full level
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CPC (source: CN EP KR)
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CN 103953544 A 20140730 - ZHUHAI GREE REFRIGERATION TECHNOLOGY CT ENERGY SAVING & ENVIRONMENTAL PROT CO LTD &
US 2017022988 A1 20170126 - HUANG HUI [CN], et al

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