

Title (en)  
SINGLE-SCREW COMPRESSOR AND REFRIGERATION/AIR-CONDITIONING DEVICE EQUIPPED WITH SAME

Title (de)  
EINZELSCHRAUBENVERDICHTER UND KÜHL-/KLIMAAANLAGE DAMIT

Title (fr)  
COMPRESSEUR À VIS UNIQUE ET DISPOSITIF DE RÉFRIGÉRATION/CLIMATISATION ÉQUIPÉ DE CELUI-CI

Publication  
**EP 3557064 B1 20200923 (EN)**

Application  
**EP 16924378 A 20161219**

Priority  
JP 2016087743 W 20161219

Abstract (en)  
[origin: EP3557064A1] A single-screw compressor includes: a casing which forms an outer periphery thereof; a screw including spiral tooth grooves formed in its outer peripheral surface; a gate rotor which defines along with the casing and the screw a compression chamber, and which includes gate-rotor teeth formed to fit in the tooth grooves; and a gate-rotor support which supports the gate rotor, and includes gate-rotor support teeth provided to face the gate-rotor teeth. A gate-rotor hole is formed in at least one of the gate-rotor teeth to extend therethrough in a thickness direction thereof. A support hole is formed in the gate-rotor support teeth to extend through at least one of the gate-rotor support teeth in a thickness direction thereof, and has ends one of which communicates with the gate-rotor hole and the other of which communicates with a low-pressure space provided in the casing. A pin is provided in the support hole in such a way as to be press-fitted therein. The pin comes off the support hole when an internal pressure of the compression chamber is raised to a level, thereby causing the compression chamber to communicate with the low-pressure space.

IPC 8 full level  
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