

Title (en)
REFRIGERANT COMPRESSOR AND VALVE UNIT

Title (de)
KÜHLKOMPRESSOR UND VENTILEINHEIT DAFÜR

Title (fr)
COMPRESSEUR DE FLUIDE FRIGORIGÈNE ET UNITÉ DE VANNE

Publication
EP 2280172 A1 20110202 (EN)

Application
EP 09754805 A 20090529

Priority
• JP 2009059858 W 20090529
• JP 2008142928 A 20080530

Abstract (en)
A refrigerant compressor and a valve unit having a check valve structure that reduces recompression loss and noise, that is not limited by the installation position and the installation method, and that has excellent responsiveness are provided. A refrigerant compressor (a scroll-type compressor (10)) (10) includes an injection port that communicates with a compression chamber (37) through a through-hole (28) and introduces fluid from the outside into the compression chamber (37); and a check valve (60) provided at the through-hole (28). The check valve (60) is composed of a reed valve (62) that is provided in the through-hole (28) parallel to the axial direction thereof and opens and closes in a direction perpendicular to the axial direction.

IPC 8 full level
F04B 39/10 (2006.01); **F04C 29/12** (2006.01)

CPC (source: EP)
F04C 18/0215 (2013.01); **F04C 23/008** (2013.01); **F04C 29/042** (2013.01); **F04C 29/128** (2013.01)

Cited by
DE102015100017B4; EP3572671A1; EP4170172A4; EP3098451A4; US10267311B2; US10451069B2; US10227980B2

Designated contracting state (EPC)
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 SE SI SK TR

Designated extension state (EPC)
AL BA RS

DOCDB simple family (publication)
EP 2280172 A1 20110202; **EP 2280172 A4 20180627**; JP 2009287512 A 20091210; JP 5314326 B2 20131016; WO 2009145297 A1 20091203

DOCDB simple family (application)
EP 09754805 A 20090529; JP 2008142928 A 20080530; JP 2009059858 W 20090529