

Title (en)
VARIABLE DISPLACEMENT COMPRESSOR, IN PARTICULAR FOR A REFRIGERANT CIRCUIT OF A VEHICLE AIR CONDITION SYSTEM

Title (de)
KOMPRESSOR MIT VARIABLER VERDRÄNGUNG, INSBESONDERE FÜR EINEN KÜHLMITTELKREISLAUF EINES KRAFTFAHRZEUGKLIMAANLAGENSYSTEMS

Title (fr)
COMPRESSEUR À DÉPLACEMENT VARIABLE, EN PARTICULIER POUR UN CIRCUIT DE RÉFRIGÉRANT D'UN SYSTÈME DE CONDITIONNEMENT D'AIR POUR VÉHICULE

Publication
EP 3477104 A1 20190501 (EN)

Application
EP 17198578 A 20171026

Priority
EP 17198578 A 20171026

Abstract (en)
A variable displacement compressor having a housing (10) enclosing a crank chamber (36), a suction chamber (20), and a discharge chamber (22); a plurality of cylinders (16) provided in the housing (10); a drive shaft (34) rotatably supported in the housing (10) and having a driving flange (32) connected thereto; a swash plate (24) arranged on the drive shaft (34) so as to have an adjustable inclination angle relative to a plane perpendicular to the drive shaft (34); a plurality of pistons (18), each of which is slidably disposed within one each of the cylinders (16); the pistons (18) being coupled to the swash plate (24) so as to reciprocate within the cylinders (16) with a stroke depending from the inclination of the swash plate (24); and an engagement structure (30) for connecting the swash plate (24) to the driving flange, is characterized in that the engagement structure (30) comprises at least one groove (42) and two projections (46), the projections (46) being formed integrally with at least one male arm (44) associated with the swash plate (24) or the driving flange and engaging into the at least one groove (42) associated with the driving flange (32) or the swash plate (24).

IPC 8 full level
F04B 27/10 (2006.01); **F04B 27/18** (2006.01); **F04B 39/14** (2006.01)

CPC (source: EP)
F04B 27/1072 (2013.01); **F04B 27/1804** (2013.01); **F04B 39/14** (2013.01); **F04B 2027/1827** (2013.01)

Citation (search report)
• [XAI] EP 1041281 A2 20001004 - TOYODA AUTOMATIC LOOM WORKS [JP]
• [XAI] US 5364232 A 19941115 - KIMURA KAZUYA [JP], et al
• [XAI] DE 10011173 A1 20000921 - SANDEN CORP [JP]
• [XI] JP 2001041153 A 20010213 - ZEXEL VALEO CLIMATE CONTR CORP

Designated contracting state (EPC)
AL 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 RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 3477104 A1 20190501

DOCDB simple family (application)
EP 17198578 A 20171026