

Title (en)
MULTI-STEP HELICAL SCREW COMPRESSOR UNIT

Title (de)
MEHRSTUFIGES SCHRAUBENKOMPRESSORAGGREGAT

Title (fr)
GROUPE DE COMPRESSEURS À VIS À PLUSIEURS ÉTAGES

Publication
EP 1979618 B1 20160427 (DE)

Application
EP 06754261 A 20060609

Priority
• EP 2006005558 W 20060609
• DE 102005058698 A 20051208

Abstract (en)
[origin: WO2007065484A1] The invention relates to a helical screw compressor which comprises two rotors (7, 9) having ribs (7', 9) which extend a screw-like manner and grooves which engage with each other in a combing and sealing manner. The total number of ribs of both rotors is at least 14, and the height (H) of the grooves is no more than 0,15 times the external diameter (Da) of the rotor profile (7) and/or (9). The shaft journals of the rotors have a diameter which is not smaller than half of the external diameter (Da) of the rotor profile.

IPC 8 full level
F04C 18/16 (2006.01); **F04C 23/00** (2006.01)

CPC (source: EP US)
F04C 18/084 (2013.01 - US); **F04C 18/16** (2013.01 - EP US); **F04C 23/001** (2013.01 - EP US); **F04C 29/04** (2013.01 - EP US);
F04C 2220/40 (2013.01 - EP US)

Citation (examination)
• US 4068984 A 19780117 - SPINDLER WALTER G
• JP S614889 A 19860110 - HITACHI LTD

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2007065484 A1 20070614; AT E498071 T1 20110215; CN 101321954 A 20081210; CN 101321954 B 20120613;
CN 101321955 A 20081210; DE 502006008894 D1 20110324; EP 1957797 A1 20080820; EP 1957797 B1 20160928; EP 1957798 A1 20080820;
EP 1957798 B1 20110209; EP 1957799 A1 20080820; EP 1979618 A1 20081015; EP 1979618 B1 20160427; ES 2359015 T3 20110517;
HK 1127111 A1 20090918; US 2008286129 A1 20081120; US 2008286138 A1 20081120; US 2009004036 A1 20090101;
US 2013011285 A1 20130110; US 7690901 B2 20100406; US 7713039 B2 20100511; US 9091268 B2 20150728; WO 2007065485 A1 20070614;
WO 2007065486 A1 20070614; WO 2007065487 A1 20070614

DOCDB simple family (application)
EP 2006005556 W 20060609; AT 06762002 T 20060609; CN 200680045196 A 20060609; CN 200680045270 A 20060609;
DE 502006008894 T 20060609; EP 06754260 A 20060609; EP 06754261 A 20060609; EP 06754262 A 20060609; EP 06762002 A 20060609;
EP 2006005557 W 20060609; EP 2006005558 W 20060609; EP 2006005559 W 20060609; ES 06762002 T 20060609;
HK 09104996 A 20090603; US 201213618595 A 20120914; US 9436306 A 20060609; US 9438006 A 20060609; US 9438806 A 20060609