Title (en)

CONSTRUCTIVE ARRANGEMENT INTRODUCED IN A RECIPROCATING COMPRESSOR INCLUDING A LUBRICANT OIL PUMP

Title (de

KONSTRUKTIVE, IN KOLBENVERDICHTER EINGEFÜHRTE ANORDNUNG MIT EINER SCHMIERÖLPUMPE

Title (fr)

DISPOSITION CONSTRUCTIVE INTRODUITE DANS UN COMPRESSEUR À PISTON COMPRENANT UNE POMPE À HUILE DE LUBRIFICATION

Publication

EP 3159539 A1 20170426 (EN)

Application

EP 16194859 A 20161020

Priority

BR 202015026691U A 20151021

Abstract (en)

The present invention related to the technological field of reciprocating compressors and, particularly, constructive details of lubricating oil pumps of reciprocating compressors. Problem to be solved: Nowadays, the industrial process of the rotating shaft assembling of the compressor in its rotor deforms the channels in which the lubricating oil is pumped from the bottom of the reciprocating compressor housing to the moving elements that integrate the compression functional unity of the reciprocating compressor. This deformation is mainly because of the mechanical interference between the bodies. Resolution of the problem: It is revealed a constructive arrangement introduced on reciprocating compressor including helical pump of lubricating oil where the rotating shaft comprises at least one lower region and at least one intermediate region. On the lower region of the rotating shaft, the lubricating oil is pumped by an internal channel of the rotating shaft and on the intermediate region of the rotating shaft, the lubricating oil is temporary stored and transferred, for the rotating shaft bearing region. The cooperating region between the retaining pin and the rotating shaft is limited by the lower region. Additionally, the lower region of the rotating shaft still comprises, on its external side, a contouring recess. These two features prevents that the cooperating region of the lower channel of the lubricant oil conduction suffers any type of deformation by assembling the rotating shaft on the electrical engine rotor.

IPC 8 full level

F04B 39/00 (2006.01); F04B 39/02 (2006.01)

CPC (source: EP)

F04B 39/0094 (2013.01); F04B 39/0261 (2013.01)

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Designated contracting state (EPC)

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