

Title (en)  
LIQUID INJECTION TYPE SCREW COMPRESSOR

Title (de)  
SCHRAUBENVERDICHTER MIT FLÜSSIGKEITSEINSPRITZUNG

Title (fr)  
COMPRESSEUR A VIS A INJECTION DE LIQUIDE

Publication  
**EP 1944513 A1 20080716 (EN)**

Application  
**EP 05805438 A 20051031**

Priority  
JP 2005020041 W 20051031

Abstract (en)  
A liquid injection type screw compressor in which, in a compression stroke of an working space formed by male and female rotors, liquids such as oil or water is prevented from leaking from the high pressure working space to a gas inlet side, suction resistance of gas sucked from the gas inlet to a rotor casing is reduced to improve volumetric efficiency, and shape forming of the casing is simplified. The liquid injection screw compressor has the male and female rotor pair of screw rotors, the rotor casing (1a, 1b) having a bore for receiving the rotors, a gas suction opening and a gas outlet that are provided in both end sections of the casing and communicate with the bore, and a lip section (4) projected from a bore surface (2) positioned more on the upstream side than a suction seal line (5) of the casing in order to prevent a back flow of the liquid from the bore surface toward the gas inlet side. The lip section (4) is positioned in a region surrounded by the suction seal line (5) and a line separated by a distance of one screw pitch of the rotors from the suction closure line (5) to the suction opening side.

IPC 8 full level  
**F04C 18/16** (2006.01); **F04C 29/12** (2006.01)

CPC (source: EP US)  
**F04C 18/16** (2013.01 - EP US); **F04C 29/0007** (2013.01 - EP US); **F04C 29/028** (2013.01 - EP US); **F04C 29/12** (2013.01 - EP US); **F04C 2240/10** (2013.01 - EP US)

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