

Title (en)

Single-screw compressor rotor construction.

Title (de)

Rotor für einen Verdichter mit Toroidalschraube.

Title (fr)

Construction du rotor pour compresseurs à vis globique.

Publication

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Application

EP 92109553 A 19920605

Priority

JP 13441491 A 19910605

Abstract (en)

A single-screw compressor has a rotor (2) with screw vanes (3) which is rotatably incorporated in a casing (1). The screw vane (3) has a confronting surface (31) which has a width in a rotating direction of the rotor (2) and which faces an inner peripheral wall (11) of the casing (1). A rib (6) narrower than the width of the confronting surface (31) is formed at one end in a widthwise direction of the confronting surface (31), extending along the spiral of the screw vane (3). Accordingly, a gap between the screw vane (3) and the inner peripheral wall of the casing (1) is made small, improving sealing properties. A rib-side lateral surface (32, 33) of the screw vane (3) is effectively utilized as a heat radiation surface, so that heat generated through contact between the rib (6) and the inner peripheral wall (11) of the casing (1) is radiated easily, thereby restricting the temperature rise of the screw vane (3) as well as the thermal expansion in the radial direction thereof. <IMAGE>

IPC 1-7

F04C 18/30

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

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