

Title (en)  
Vacuum pump with multiple driven shafts

Title (de)  
Mehrwellenvakuumpumpe

Title (fr)  
Pompe à vide à arbres d'entraînements multiples

Publication  
**EP 0942172 A1 19990915 (DE)**

Application  
**EP 99101291 A 19990125**

Priority  
DE 19809957 A 19980307

Abstract (en)  
The pump has a housing (1) with two cooperating rotors (4,5). At least one rotor is bell-shaped. The drive system is formed as an external rotor motor, and its rotor parts (13) are located on the inner surface of the bell-shaped rotor. The stator parts (12) are also located inside the stator opposite to the rotor parts. The rotors are supported on bearings (31,33,32,34), which are carried on stationary journals (9,10) inside the rotors. A bore in one journal supplies cooling medium to a pipe system (38), which cools the pump section containing the drive system.

Abstract (de)  
Die Erfindung betrifft eine Mehrwellenvakuumpumpe. Dabei ist mindestens einer der Rotoren (4, 5) in glockenförmiger Bauart ausgeführt. Das Antriebssystem ist als Außenläufermotor ausgebildet, wobei dessen Rotorteile (13) an der Innenfläche des glockenförmigen Rotors (4) angebracht sind und die Statorteile (12) jenen gegenüber innerhalb des glockenförmigen Rotors (4) fest montiert sind. Weitere Bauteile zur elektrischen Versorgung des Antriebssystems<1>, zur Kühlmittelversorgung und zur Ölversorgung werden ebenfalls in dem Inneren des Rotors integriert.  
<IMAGE>

IPC 1-7  
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IPC 8 full level  
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• [X] GB 809445 A 19590225 - HERAEUS GMBH W C  
• [A] US 5674051 A 19971007 - MARUYAMA TERUO [JP]  
• [A] FR 2668209 A1 19920424 - HITACHI KOKI KK [JP]  
• [A] EP 0472933 A2 19920304 - MATSUSHITA ELECTRIC IND CO LTD [JP]

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