

Title (en)  
OIL-FREE ROTARY PUMP OR COMPRESSOR WITH SEMI-SPHERICAL VANES FOR COMPRESSING OR PUMPING GASEOUS OR LIQUID FLUIDS

Title (de)  
ÖLFREIE DREHKOLBENPUMPE ODER VERDICHTER MIT HALBKUGELFÖRMIGEN SCHAUFELN ZUM KOMPRIMIEREN ODER PUMPEN FLÜSSIGER ODER GASFÖRMIGER FLUIDE

Title (fr)  
COMPRESSEUR OU POMPE ROTATIVE A PALETTES SEMI- SPHERIQUES « SANS HUILE » POUR COMPRIMER OU POMPER LES FLUIDES GAZEUX OU LIQUIDES

Publication  
**EP 2776676 A1 20140917 (FR)**

Application  
**EP 11768061 A 20110923**

Priority  
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Abstract (en)  
[origin: WO2013041777A1] The invention relates to a machine for continuously compressing liquid or gaseous fluids, without lubrication, using a semi-spherical circular wheel which supports vanes and is guided in a semi-spherical circular chamber that is eccentric to the wheel. The compression is performed by means of semi-spheroidal vane technology. The vanes are made from deformable synthetic material. The sealing is provided by a continuous line that runs from the side wall on one side to the side wall on the opposite side, without any form-altering angles. The machine operates without oil owing to its self-lubricating synthetic vanes. Moreover, the machine can also pump, under high pressure, liquid fluids that are not be mixed with the lubricating oil of ordinary pumps.

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