

Title (en)  
COMPRESSORS

Title (de)  
KOMPRESSOREN

Title (fr)  
COMPRESSEURS

Publication  
**EP 3069024 A4 20170823 (EN)**

Application  
**EP 14853830 A 20141020**

Priority  
• US 201361961553 P 20131018  
• US 201361962523 P 20131112  
• US 2014061388 W 20141020

Abstract (en)  
[origin: US2015110647A1] Disclosed compressor embodiments can prevent or substantially reduce the inefficient upwardly spiraling heat buildup found in typical compressors by significantly increasing the surface area of mating piston and chamber walls, using the meshing and undulating geometry of the piston/chamber walls to create increased air turbulence in the chamber and generate more air flow against the cooling walls, promoting turbulence even more by varying the axial path of the piston head so that it is not simply linear, using fluid to cool the non-working side of the piston, and/or providing additional cooling features (such as fins) on the non-working side of the piston to provide still further cooling means for the piston head. Analogous principles can also be included in wobble-plate compressors, scroll compressors, blowers, and other compressor types.

IPC 8 full level  
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Citation (search report)  
• [A] CN 103334904 A 20131002 - XIAO BO  
• [A] SU 1523716 A1 19891123 - GLAZUNOV BORIS A [SU]  
• [A] GB 2499336 A 20130814 - LIETUVIETIS VILIS IVARS [EE]  
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• [A] US 4446698 A 19840508 - BENSON GLENDON M [US]  
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Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

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**US 2015110647 A1 20150423**; EP 3069024 A1 20160921; EP 3069024 A4 20170823; WO 2015058198 A1 20150423

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**US 201414518847 A 20141020**; EP 14853830 A 20141020; US 2014061388 W 20141020