

Title (en)  
Compressor wheel assembly.

Title (de)  
Aufbau eines Verdichterlaufrades.

Title (fr)  
Assemblage de roue de compresseur.

Publication  
**EP 0129311 A1 19841227 (EN)**

Application  
**EP 84302654 A 19840418**

Priority  
US 48714483 A 19830421

Abstract (en)  
A compressor wheel assembly for example for a turbocharger comprises a compressor wheel (12) including a boreless hub (14) formed integrally as by casting from aluminium with a circumferential array of aerodynamically contoured centrifugal impeller blades (16). The wheel hub is secured at its base by inertia welding to a steel thrust spacer sleeve (18) having an internally threaded bore (34) for threaded reception of a rotatable shaft (20). In use of the compressor wheel assembly, the absence of a bore within the wheel hub substantially improves wheel fatigue life.

IPC 1-7  
**F01D 5/04**

IPC 8 full level  
**F04D 29/28** (2006.01); **B21D 53/78** (2006.01); **F01D 5/02** (2006.01); **F01D 5/04** (2006.01)

CPC (source: EP)  
**F01D 5/025** (2013.01); **F01D 5/048** (2013.01); **F04D 29/266** (2013.01)

Citation (search report)  
• [X] GB 2091380 A 19820728 - MTU FRIEDRICHSHAFEN GMBH [DE]  
• [A] US 2465625 A 19490329 - GEORGE AUE  
• [Y] DIESEL AND GAS TURBINE WORLDWIDE CATALOG, edition 1982, vol. 47, pages 1209-1211, Brookfield, Wisconsin, US; "High pressure ratio turbochargers available"

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