

Title (en)  
COMPRESSOR BLADES

Title (de)  
VERDICHTERSCHAUFELN

Title (fr)  
PALES DE COMPRESSEUR

Publication  
**EP 3392459 A1 20181024 (EN)**

Application  
**EP 17175536 A 20170612**

Priority  
GR 20170100180 A 20170418

Abstract (en)

This disclosure concerns aerofoils (24) for an axial flow compressor (14). The compressor (14) has an array of aerofoils (14B, 24) angularly spaced about its axis of rotation (11). The aerofoils (24) have leading (32) and trailing (34) edges extending in a direction spanning a flow region defined between a radially inner rotor component (14A) and a radially outer casing (14C). Each aerofoil (24) has opposing pressure (36) and suction (38) surfaces extending between the leading (32) and trailing (34) edges and terminating at a free end (30) of the aerofoil. Each aerofoil (24) leans towards the pressure surface (36) by an angle of between 10° and 80° in the vicinity of the aerofoil tip (30). The aggressive negative lean towards the tip (30) may help reduce over-tip leakage flow in use.

IPC 8 full level  
**F01D 5/20** (2006.01); **F04D 29/32** (2006.01); **F04D 29/68** (2006.01)

CPC (source: EP US)  
**F01D 5/20** (2013.01 - EP US); **F04D 29/164** (2013.01 - EP); **F04D 29/324** (2013.01 - EP US); **F04D 29/384** (2013.01 - US);  
**F04D 29/544** (2013.01 - EP US); **F04D 29/681** (2013.01 - US); **F05D 2240/125** (2013.01 - EP US); **F05D 2240/307** (2013.01 - EP US);  
**F05D 2250/71** (2013.01 - EP US)

Citation (applicant)

- US 2008213098 A1 20080904 - NEEF MATTHIAS [DE], et al
- EP 1953344 A1 20080806 - SIEMENS AG [DE]

Citation (search report)

- [X] GB 946794 A 19640115 - COLCHESTER WOODS
- [X] WO 2014109959 A1 20140717 - UNITED TECHNOLOGIES CORP [US]
- [X] US 2012243975 A1 20120927 - BREEZE-STRINGFELLOW ANDREW [US], et al
- [X] EP 2990602 A1 20160302 - PRATT & WHITNEY CANADA [CA]
- [XD] US 2008213098 A1 20080904 - NEEF MATTHIAS [DE], et al

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

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 3392459 A1 20181024**; US 2018298912 A1 20181018

DOCDB simple family (application)  
**EP 17175536 A 20170612**; US 201715634244 A 20170627