

Title (en)  
Layered structure and method to produce such a layered structure

Title (de)  
Schichtstruktur und Verfahren zur Herstellung einer Schichtstruktur

Title (fr)  
Structure stratifiée et procédé de fabrication de la structure stratifiée

Publication  
**EP 1475567 A1 20041110 (DE)**

Application  
**EP 03010387 A 20030508**

Priority  
EP 03010387 A 20030508

Abstract (en)  
The laminated structure (1) consists of a underlayer (4), an at least partially porous intermediate layer (7) on the underlayer, and an at least partially sealed outer layer (13). The intermediate layer and underlayer are metal or ceramic. The intermediate layer may be in foam or sponge form. The outer layer is ceramic and especially a heat insulating layer. The underlayer has cooling passages (16) through which a cooling medium through the underlayer can reach the porous intermediate layer. An independent claim is included for a method for the manufacture of a laminated structure.

Abstract (de)  
Schichtstrukturen nach dem Stand der Technik weisen eine nicht so effiziente Kühlung gegen ein äußeres heißes Gas auf. Die erfindungsgemäß ausgebildete Schichtstruktur (1) weist neben einer porösen Zwischenschicht (7) eine zumindest teilweise dichte Außenschicht (13) auf. Somit kann die Kühlung und der Schutz vor zu hohem Wärmeeintrag für die Schichtstruktur (1) verbessert werden. <IMAGE>

IPC 1-7  
**F23R 3/00; F01D 5/18; F01D 5/28**

IPC 8 full level  
**F01D 5/18** (2006.01); **F01D 5/28** (2006.01); **F23R 3/00** (2006.01)

CPC (source: EP)  
**F01D 5/183** (2013.01); **F01D 5/288** (2013.01); **F23R 3/002** (2013.01); **F05D 2260/203** (2013.01); **F05D 2300/612** (2013.01)

Citation (search report)  
• [X] US 2001042607 A1 20011122 - ROESLER HANS-JOACHIM [DE], et al  
• [X] GB 1377648 A 19741218 - PENNY R N  
• [X] US 5605046 A 19970225 - LIANG GEORGE P [US]  
• [X] US 6495207 B1 20021217 - PROCIW LEV ALEXANDER [CA], et al  
• [DX] WO 03006883 A1 20030123 - SIEMENS AG [DE], et al  
• [DX] US 3825364 A 19740723 - HALILA E, et al  
• [A] US 2003021905 A1 20030130 - LEE CHING-PANG [US], et al  
• [DX] PATENT ABSTRACTS OF JAPAN vol. 1998, no. 14 31 December 1998 (1998-12-31)

Cited by  
WO2019141755A1; DE102010051638A1; EP1712745A1; DE102017216759A1; EP3514328A1; EP3486430A1; CN103807844A; DE102006026969A1; CN109072702A; DE102005002671B3; DE102008058141A1; DE102008058142A1; EP3244013A1; CN107448244A; EP1500880A3; EP3222814A1; US11697994B2; US9016067B2; US8137063B2; US9739157B2; WO2018004767A3; WO2014163679A1; WO2017196470A3; WO2006074949A1; WO2006108746A1; US7926278B2; US10458259B2; JP2008536050A; US10598026B2

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