

Title (en)
Heat shield

Title (de)
Hitzeschild

Title (fr)
Bouclier thermique

Publication
EP 0916897 A2 19990519 (DE)

Application
EP 98811060 A 19981022

Priority
DE 19750517 A 19971114

Abstract (en)
The heat shield (1) consists of a felt-like material (3) made of pressed and sintered inter metallic fibers. The fibers may consist of an inter metallic phase based on iron or nickel. The felt-like material may be arranged on a substrate material (2), and have a thermally insulating layer (4) made of partially or fully stabilized zircon oxide. The heat shield can be cooled by open pores in the felt-like material.

Abstract (de)
Bei einem Hitzeschild (1), insbesondere für Brennkammer und für thermische Strömungsmaschinen, besteht der Hitzeschild aus einem filzähnlichen Material (3) aus zusammengepressten und gesinterten intermetallischen Fasern. Die intermetallischen Fasern bestehen vorteilhafterweise aus einer intermetallischen Phase auf Eisenbasis oder Nickelbasis. <IMAGE>

IPC 1-7
F23R 3/00; **F16L 59/00**; **F01D 25/08**

IPC 8 full level
F01D 25/00 (2006.01); **F01D 25/08** (2006.01); **F02C 7/00** (2006.01); **F16L 59/00** (2006.01); **F16L 59/02** (2006.01); **F23R 3/00** (2006.01); **F23R 3/42** (2006.01)

CPC (source: EP US)
F01D 25/08 (2013.01 - EP US); **F23R 3/007** (2013.01 - EP US); **F05C 2201/0466** (2013.01 - EP US); **F05D 2300/2118** (2013.01 - EP US); **F05D 2300/614** (2013.01 - EP US); **Y10T 428/12153** (2015.01 - EP US); **Y10T 428/12444** (2015.01 - EP US); **Y10T 428/12479** (2015.01 - EP US); **Y10T 428/12535** (2015.01 - EP US); **Y10T 428/12611** (2015.01 - EP US); **Y10T 428/12618** (2015.01 - EP US); **Y10T 428/12944** (2015.01 - EP US); **Y10T 428/12951** (2015.01 - EP US); **Y10T 428/131** (2015.01 - EP US)

Citation (applicant)
• DE 3327216 A1 19850207 - MTU MUENCHEN GMBH [DE]
• STEPHANI ET AL: "METALLISCHE HOCHTEMPERATURFASERN DURCH SCHMELZEXTRAKTION- HERSTELLUNG, EIGENSCHAFTEN UND ANWENDUNGEN", VDI BERICHT 1151, 1 January 1995 (1995-01-01), pages 175FF

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EP1126221A1; US7141128B2; WO0161250A1

Designated contracting state (EPC)
DE GB

DOCDB simple family (publication)
EP 0916897 A2 19990519; **EP 0916897 A3 20001025**; **EP 0916897 B1 20030604**; DE 19750517 A1 19990520; DE 59808608 D1 20030710; JP H11236995 A 19990831; US 6492034 B1 20021210

DOCDB simple family (application)
EP 98811060 A 19981022; DE 19750517 A 19971114; DE 59808608 T 19981022; JP 32070198 A 19981111; US 19036498 A 19981112