

Title (en)  
DIE CAST SUPERALLOY ARTICLES

Title (de)  
SUPERLEGIERUNGSDRUCKGUSSTEILE

Title (fr)  
PIECES MOULEES SOUS PRESSION EN SUPERALLIAGE

Publication  
**EP 1153151 A4 20021106 (EN)**

Application  
**EP 99968962 A 19991222**

Priority  
• US 9931000 W 19991222  
• US 11356798 P 19981223

Abstract (en)  
[origin: WO0037695A1] A die cast article (10) composed of a nickel or cobalt base superalloy is disclosed, and is characterized by a microstructure having an absence of flowlines, and a fine average grain size relative to corresponding forged or investment cast articles. The articles include gas turbine engine components.

IPC 1-7  
**C22C 19/07**; **C22C 19/05**; **C22C 1/02**

IPC 8 full level  
**C22C 19/05** (2006.01); **C22F 1/10** (2006.01)

CPC (source: EP KR)  
**C22C 19/05** (2013.01 - KR); **C22C 19/055** (2013.01 - EP); **C22C 19/056** (2013.01 - EP); **C22F 1/10** (2013.01 - EP)

Citation (search report)  
• [X] US 4512383 A 19850423 - SUZUKI SHUNSUKE [JP], et al  
• [X] JP S5316663 A 19780215 - TOSHIBA MACHINE CO LTD  
• [X] US 4284124 A 19810818 - KOMATSU MIKIYA, et al  
• [X] MA ET AL: "Investigation of microstructure of fine grain cast IN718 compressor blade from abroad", STN CAPLUS, XX, XX, vol. 128, no. 12, 23 March 1998 (1998-03-23), XP002136723  
• See references of WO 0037695A1

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)  
**WO 0037695 A1 20000629**; AT E354684 T1 20070315; AU 2715200 A 20000712; DE 69935258 D1 20070405; DE 69935258 T2 20071031; EP 1153151 A1 20011114; EP 1153151 A4 20021106; EP 1153151 B1 20070221; IL 143933 A0 20020421; JP 2003529676 A 20031007; KR 100640135 B1 20061031; KR 20010108041 A 20011207

DOCDB simple family (application)  
**US 9931000 W 19991222**; AT 99968962 T 19991222; AU 2715200 A 19991222; DE 69935258 T 19991222; EP 99968962 A 19991222; IL 14393399 A 19991222; JP 2000589748 A 19991222; KR 20017008010 A 20010622