

Title (en)

APPARATUS AND METHODS FOR ASSEMBLING A HELICOPTER MAIN ROTOR BLADE SUBASSEMBLY

Title (de)

GERÄT UND VERFAHREN ZUM ZUSAMMENSTELLEN EINES HUBSCHRAUBER-HAUPTROTORBLATTS

Title (fr)

APPAREIL ET PROCEDE POUR ASSEMBLER UN SOUS-ENSEMBLE DE PALE DE ROTOR PRINCIPAL D'HELICOPTERE

Publication

EP 1019243 A1 20000719 (EN)

Application

EP 98912007 A 19980325

Priority

- US 9805781 W 19980325
- US 84352797 A 19970416
- US 83829597 A 19970416

Abstract (en)

[origin: WO9846419A1] An apparatus and method for assembling a helicopter main rotor blade subassembly which includes a lower airfoil skin, a core, an upper airfoil skin, and a spar assembly having a tip end and a root end, the apparatus comprising a lower assembly (202) including a base (206) having a contoured upper airfoil nest (208), wherein the contoured upper airfoil nest has a root end and a tip end, at least two guide ramps (214, 216) disposed proximal to the contoured upper airfoil nest, wherein at least one of the guide ramps is disposed proximal to the root end and at least one of the guide ramps is disposed proximal to the tip end, and a plurality of leading-edge pusher cams (230) disposed proximal to the contoured upper airfoil nest. An upper assembly (250) configured for mating with the lower assembly is provided, and comprises a support structure (252) and a flexible impervious membrane (254) supported by the support structure, wherein the flexible impervious membrane and the contoured upper airfoil nest define a molding cavity therebetween upon mating of the upper assembly to the lower assembly.

IPC 1-7

B29D 31/00; **B64C 27/473**

IPC 8 full level

B64C 27/473 (2006.01); **B29C 70/38** (2006.01); **B29D 99/00** (2010.01); **B64F 5/00** (2006.01)

CPC (source: EP KR)

B29C 70/38 (2013.01 - EP); **B29D 99/0028** (2013.01 - EP); **B64C 27/473** (2013.01 - KR); **B64F 5/10** (2016.12 - EP); **B29L 2031/082** (2013.01 - EP)

Citation (search report)

See references of WO 9846419A1

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

WO 9846419 A1 19981022; CA 2286830 A1 19981022; CN 1064897 C 20010425; CN 1252754 A 20000510; EP 1019243 A1 20000719; JP 2001520599 A 20011030; JP 4067574 B2 20080326; KR 100521734 B1 20051017; KR 20010006429 A 20010126; TW 412457 B 20001121

DOCDB simple family (application)

US 9805781 W 19980325; CA 2286830 A 19980325; CN 98804230 A 19980325; EP 98912007 A 19980325; JP 54392598 A 19980325; KR 19997009519 A 19991015; TW 87105760 A 19980415