

Title (en)

ROTATIONAL DUCTED FAN (RDF) PROPULSION SYSTEM

Title (de)

ANTRIEBSSYSTEM MIT ROTIERENDEM MANTELPROPELLER (RDF)

Title (fr)

SYSTÈME DE PROPULSION À SOUFFLANTE CARÉNÉE ROTATIVE (RDF)

Publication

EP 3261928 A4 20180912 (EN)

Application

EP 15881340 A 20150202

Priority

US 2015014093 W 20150202

Abstract (en)

[origin: WO2016126231A1] In accordance with the present invention, an embodiment of a rotational ducted fan motor comprises a monolithic rotational ducted fan rotor, an electric propulsion system, a static aft-shroud comprising electrochemical-energy-storage, and an engagement system. The rotational ducted fan rotor is the portion of a ducted fan motor comprising a propeller, a duct, and a center hub, and having the effect of increasing the pressure difference from upstream to downstream of the propeller. The electric propulsion system comprises permanent magnets affixed to the rotational ducted fan rotor, repelling magnetic coils affixed to the static aft-shroud and electrical power provided by the electrochemical-energy-storage comprised within the aft-shroud.

IPC 8 full level

B64D 27/24 (2006.01)

CPC (source: EP)

B64C 11/001 (2013.01); **B64D 27/24** (2013.01); **H02K 7/14** (2013.01); **Y02T 50/40** (2013.01); **Y02T 50/60** (2013.01)

Citation (search report)

- [A] US 5183222 A 19930202 - RAMSEY JR JOHN W [US]
- [A] US 5607329 A 19970304 - CHO CHAHEE P [US], et al
- [A] US 5220231 A 19930615 - VERONESI LUCIANO [US], et al
- [A] US 2012093669 A1 20120419 - GIERAS JACEK F [US], et al
- [A] US 5702273 A 19971230 - CHO CHAHEE PETER [US], et al
- [A] GB 2370922 A 20020710 - BROWN ANDREW DAVID [GB]
- [A] US 6809444 B1 20041026 - GIESEKE THOMAS J [US]
- [A] US 2010284806 A1 20101111 - VAUCHEL GUY BERNARD [FR], et al
- See references of WO 2016126231A1

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

DOCDB simple family (publication)

WO 2016126231 A1 20160811; CA 2981926 A1 20160811; CN 107428416 A 20171201; EP 3261928 A1 20180103; EP 3261928 A4 20180912

DOCDB simple family (application)

US 2015014093 W 20150202; CA 2981926 A 20150202; CN 201580078673 A 20150202; EP 15881340 A 20150202