

Title (en)  
ROTARY ACTUATOR

Title (de)  
DREHSTELLANTRIEB

Title (fr)  
ACTIONNEUR ROTATIF

Publication  
**EP 3485557 A4 20200318 (EN)**

Application  
**EP 17826734 A 20170714**

Priority  
• US 201662363202 P 20160715  
• US 201615235088 A 20160811  
• CA 2017050858 W 20170714

Abstract (en)  
[origin: WO2018010032A1] An actuator for high rotational speed applications using a stator which utilizes laminated features to reduce Eddy current losses in the stator. This construction allows high pole counts while providing the efficiency and high speed benefits of a laminated construction. Laminated construction is very challenging for a high pole count lightweight motor, but embodiments of the device provide structural strength, and rigidity, as well as other benefits such as low manufacturing cost, high heat dissipation, integrated cooling channels, and light weight construction. Many of these benefits result from the use of a laminate sandwich of non-magnetic, heat conductive material, such as anodized aluminum, as a structural member of the stator.

IPC 8 full level  
**H02K 1/16** (2006.01); **H02K 1/20** (2006.01); **H02K 7/08** (2006.01); **H02K 16/00** (2006.01)

CPC (source: EP KR)  
**H02K 1/146** (2013.01 - EP KR); **H02K 1/20** (2013.01 - EP); **H02K 7/088** (2013.01 - EP KR); **H02K 16/02** (2013.01 - EP KR); **H02K 21/24** (2013.01 - EP KR); **H02K 2201/03** (2013.01 - KR)

Citation (search report)  
• [IAY] DE 10140362 A1 20030306 - FAN YU-FANG [TW], et al  
• [Y] US 2015349591 A1 20151203 - DEGUCHI KENTA [JP], et al  
• [A] EP 2999102 A2 20160323 - LEROY SOMER MOTEURS [FR]  
• [A] US 2008238266 A1 20081002 - MORIYAMA TAKASHI [JP], et al  
• See references of WO 2018010032A1

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 2018010032 A1 20180118**; CA 3030064 A1 20180118; CN 109478806 A 20190315; CN 109478806 B 20210706; EP 3485557 A1 20190522; EP 3485557 A4 20200318; JP 2019522458 A 20190808; JP 6868690 B2 20210512; KR 102197474 B1 20201231; KR 20190021375 A 20190305

DOCDB simple family (application)  
**CA 2017050858 W 20170714**; CA 3030064 A 20170714; CN 201780044427 A 20170714; EP 17826734 A 20170714; JP 2019523150 A 20170714; KR 20197002070 A 20170714