

Title (en)  
AN ELECTRICAL MACHINE

Title (de)  
ELEKTRISCHE MASCHINE

Title (fr)  
MACHINE ÉLECTRIQUE

Publication  
**EP 2550720 A2 20130130 (EN)**

Application  
**EP 11715256 A 20110314**

Priority  
• FI 20105288 A 20100323  
• FI 2011050217 W 20110314

Abstract (en)  
[origin: WO2011117466A2] An air-gap diameter of a rotor of an electrical machine is arranged to have a con- cave axial profile or a bore diameter of a stator is arranged to have a convex axial profile so that the air-gap (107) of the electrical machine is substantially constant in the axial direction (z), even though the stator core is bent (130) by magnetic forces caused by a magnetic flux corresponding to the nominal use of the electrical machine. It is also possible to have both the concave rotor air-gap diameter profile and the convex stator bore diameter profile. Because of the concave rotor airgap diameter profile and/or convex stator bore diameter profile, a support structure (105) which is needed in large diameter electrical machines for supporting a stator core assembled of tangential segments can be allowed to be more flexible and thus savings in the weight of the support structure can be achieved.

IPC 8 full level  
**H02K 1/22** (2006.01)

CPC (source: EP US)  
**H02K 1/12** (2013.01 - EP); **H02K 1/22** (2013.01 - EP); **H02K 1/2781** (2022.01 - EP US); **H02K 1/06** (2013.01 - EP); **H02K 7/1838** (2013.01 - EP); **H02K 2201/03** (2013.01 - EP); **H02K 2213/03** (2013.01 - EP); **Y02E 10/72** (2013.01 - EP)

Citation (search report)  
See references of WO 2011117466A2

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 2011117466 A2 20110929; WO 2011117466 A3 20121227**; CN 103155357 A 20130612; CN 103155357 B 20160921;  
EP 2550720 A2 20130130; FI 20105288 A0 20100323

DOCDB simple family (application)  
**FI 2011050217 W 20110314**; CN 201180015599 A 20110314; EP 11715256 A 20110314; FI 20105288 A 20100323