

Title (en)
AN APPARATUS AND METHOD FOR CONTROLLING CURRENT IN AN ELECTRIC SUPERCHARGER

Title (de)
VERFAHREN UND VORRICHTUNG ZUR STEUERUNG VON STROM IN EINEM ELEKTRISCHEN KOMPRESSOR

Title (fr)
APPAREIL ET PROCÉDÉ DE COMMANDE D'INTENSITÉ DE COURANT DANS UN COMPRESSEUR D'ALIMENTATION ÉLECTRIQUE

Publication
EP 3221959 A1 20170927 (EN)

Application
EP 15794628 A 20151109

Priority
• GB 201420632 A 20141120
• GB 2015053396 W 20151109

Abstract (en)
[origin: WO2016079473A1] A method of controlling a motor in an electric supercharger when instructed to increase the speed of the motor to a target speed (2), the method comprising the steps of repeatedly:(i) calculating an adjusted target speed (13); (ii) determining the difference between the adjusted target speed (13) and the actual speed (4) of the motor; (iii) determining a torque set-point (10) for changing the speed of the motor from the actual speed (4) towards the adjusted target speed (13), and (iv) supplying electrical current to the motor dependent on said torque set point (10).The adjusted target speed (13) is calculated as a function of the time elapsed since the instruction to increase the speed, the function being such that, over a response time, the adjusted target speed (13) approaches the target speed (13).

IPC 8 full level
H02P 25/08 (2016.01); **F02B 39/10** (2006.01); **F02B 39/16** (2006.01); **F02D 41/00** (2006.01); **F02D 41/20** (2006.01); **H02P 6/06** (2006.01);
H02P 6/08 (2016.01); **H02P 21/05** (2006.01); **H02P 21/22** (2016.01); **H02P 23/04** (2006.01)

CPC (source: EP GB)
F02B 37/12 (2013.01 - GB); **F02B 39/10** (2013.01 - EP GB); **F02B 39/16** (2013.01 - EP GB); **F02D 41/0007** (2013.01 - GB);
H02P 7/02 (2016.02 - GB); **H02P 7/03** (2016.02 - GB); **H02P 23/0004** (2013.01 - EP GB); **H02P 23/04** (2013.01 - EP GB);
H02P 25/0805 (2016.02 - EP GB); **F02B 2037/122** (2013.01 - GB); **F02D 41/0007** (2013.01 - EP)

Citation (search report)
See references of WO 2016079473A1

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

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
WO 2016079473 A1 20160526; EP 3221959 A1 20170927; GB 201420632 D0 20150107; GB 2536605 A 20160928; GB 2536605 B 20201007

DOCDB simple family (application)
GB 2015053396 W 20151109; EP 15794628 A 20151109; GB 201420632 A 20141120