

Title (en)
DRIVE FOR HOME APPLIANCE

Title (de)
ANTRIEB FÜR HAUSHALTSGERÄT

Title (fr)
DISPOSITIF DE COMMANDE POUR APPAREIL ÉLECTROMÉNAGER

Publication
EP 3175313 A4 20180328 (EN)

Application
EP 14898684 A 20140729

Priority
IB 2014063510 W 20140729

Abstract (en)
[origin: WO2016016685A1] A drive for a home appliance (100) comprising (a) an electric motor (150) connectable to an operating tool of said home appliance (100); (b) a power regulating element (130) energizing said motor (150); (c) a Hall sensor (140) generating an electric signal corresponding to rotating speed of said motor (150); and (d) a PID controlled (120) preprogrammed to receive electric signals from said Hall sensor (140) and generating a PID output applicable to said regulating element (130) such that a predetermined rotating speed is maintained constant. The PID output is computed according to the following equation: Formula (I), where e k is a present sample, e k-1 is a previous sample, e k-2 is a last previous sample; X is in a range between 1.5 and 2, Y between 1 and 3, Z between 1 and 3.

IPC 8 full level
G05D 13/60 (2006.01); **A47J 43/08** (2006.01); **G05B 11/42** (2006.01); **H02P 7/28** (2016.01); **H02P 7/295** (2016.01)

CPC (source: EP)
G05B 11/42 (2013.01); **H02P 7/2805** (2013.01); **H02P 7/295** (2013.01); **H02P 2205/07** (2013.01)

Citation (search report)
• [Y] US 2013214716 A1 20130822 - BARFUS DAN CHRISTIAN [US], et al
• [Y] OUDJIDA A K ET AL: "Design of high-speed and low-power finite-word-length PID controllers", CONTROL THEORY AND TECHNOLOGY, SOUTH CHINA UNIVERSITY OF TECHNOLOGY AND ACADEMY OF MATHEMATICS AND SYSTEMS SCIENCE, CAS, HEIDELBERG, vol. 12, no. 1, 18 January 2014 (2014-01-18), pages 68 - 83, XP035309780, ISSN: 2095-6983, [retrieved on 20140118], DOI: 10.1007/S11768-014-2131-5
• [A] HOLGER LUTZ ET AL: "Taschenbuch der Regelungstechnik, 6. Auflage", 2005, pages 466 - 479, XP055452169, ISBN: 978-3-8171-1749-9, Retrieved from the Internet <URL:https://www.europa-lehrmittel.de/c-387/edition_harri_deutsch/> [retrieved on 20180216]
• See references of WO 2016016685A1

Designated contracting state (EPC)
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