

Title (en)

CURRENT SOURCE, CONTROL DEVICE AND METHOD FOR OPERATING SAID CONTROL DEVICE

Title (de)

STROMQUELLE, STEUERVORRICHTUNG UND VERFAHREN ZUM BETREIBEN DER STEUERVORRICHTUNG

Title (fr)

SOURCE DE COURANT, DISPOSITIF DE COMMANDE ET PROCEDE POUR FAIRE FONCTIONNER CE DISPOSITIF DE COMMANDE

Publication

**EP 1917433 A1 20080507 (DE)**

Application

**EP 06792937 A 20060822**

Priority

- EP 2006065548 W 20060822
- DE 102005040531 A 20050826

Abstract (en)

[origin: WO2007023159A1] The invention relates to a current source comprising a first switching element (T1), which has a control input (54) and is designed to adjust an output current ( $I_A$ ) in accordance with a control signal that is received by said control input (54). The current source also comprises a reference resistance ( $R_S$ ), which is electrically coupled to the first switching element (T1) in such a way that the output current ( $I_A$ ) flows through the reference resistance ( $R_S$ ). The latter ( $R_S$ ) comprises first and second individual reference resistances (R5, R6), which are arranged in series and a diode (D1) that is connected in parallel to the first individual reference resistance (R5). The first individual reference resistance (R5) has a higher impedance than the second individual reference resistance (R6). The power source is equipped with a controller (52), to which a predetermined reference potential ( $U_{REF}$ ) is fed and whose actuating signal constitutes the control signal of the first switching element (T1). A second switching element (T2) is configured to supply the controller (52) with an actual value consisting of the voltage across between the first and second individual reference resistances (R5, R6), when the element adopts a first switching position and consisting of the voltage drop across the second individual reference resistance (R6), when the element adopts a second switching position.

IPC 8 full level

**F02D 41/20** (2006.01); **H01L 41/04** (2006.01)

CPC (source: EP KR US)

**F02D 41/20** (2013.01 - KR); **F02D 41/2096** (2013.01 - EP US); **H02N 2/067** (2013.01 - EP US); **H10N 30/80** (2023.02 - KR);  
**F02D 2041/2058** (2013.01 - EP US)

Citation (search report)

See references of WO 2007023159A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

**WO 2007023159 A1 20070301**; CN 101310102 A 20081119; CN 101310102 B 20110413; DE 102005040531 A1 20070322;  
EP 1917433 A1 20080507; KR 101248987 B1 20130329; KR 20080082598 A 20080911; US 2008238199 A1 20081002;  
US 7732946 B2 20100608

DOCDB simple family (application)

**EP 2006065548 W 20060822**; CN 200680031133 A 20060822; DE 102005040531 A 20050826; EP 06792937 A 20060822;  
KR 20087007319 A 20060822; US 6484606 A 20060822