

Title (en)
BUS MODULE USED FOR CONTROLLING FLUIDIC VALVES

Title (de)
BUSMODUL ZUR STEUERUNG VON FLUIDIK-VENTILEN

Title (fr)
MODULE BUS PERMETTANT DE COMMANDER DES VALVES FLUIDIQUES

Publication
EP 1761710 B2 20120425 (DE)

Application
EP 05759256 A 20050611

Priority
• EP 2005006288 W 20050611
• DE 102004029549 A 20040618

Abstract (en)
[origin: US7881828B2] A bus module for connecting electrically triggerable fluidic valves to a data bus. The bus module has an electrical circuit configuration, which evaluates address data and user data from data telegrams transmitted on the data bus and which triggers a fluidic valve determined by the address data in accordance with the user data of the data telegram. In order to keep the current load on the bus module low particularly when triggering hydraulic valves, the electronic circuit configuration, following the reception of user data in the form of a switch-on command for one of the fluidic valves connected to the bus module, first constantly supplies a supply voltage to the fluidic valve determined by the address data during a gate-controlled rise time of specifiable duration. Following the expiration of the gate-controlled rise time, the electronic circuit configuration supplies the fluidic valve with the supply voltage in a pulse width modulated form having a specifiable pulse control factor. Only when the bus module has received user data in the form of a switch-off command for the previously switched-on fluidic valve, does the electronic circuit configuration no longer supply a supply voltage to the fluidic valve.

IPC 8 full level
F15B 21/00 (2006.01); **F15B 21/08** (2006.01)

CPC (source: EP US)
F15B 21/085 (2013.01 - EP US)

Citation (opposition)
Opponent :
• EP 1002961 B1 20040114 - BOSCH REXROTH AG [DE]
• DE 3415649 A1 19851107 - TIEFENBACH & CO DR H [DE]
• DE 19647215 A1 19970724 - FESTO KG [DE]
• DE 9219093 U1 19971016 - MANNESMANN AG [DE]

Cited by
DE102017222463A1; US11085553B2

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 MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2005124161 A1 20051229; AT E424512 T1 20090315; CN 100523523 C 20090805; CN 1977111 A 20070606;
DE 102004029549 A1 20060105; DE 502005006758 D1 20090416; EP 1761710 A1 20070314; EP 1761710 B1 20090304;
EP 1761710 B2 20120425; US 2009019200 A1 20090115; US 7881828 B2 20110201

DOCDB simple family (application)
EP 2005006288 W 20050611; AT 05759256 T 20050611; CN 200580019707 A 20050611; DE 102004029549 A 20040618;
DE 502005006758 T 20050611; EP 05759256 A 20050611; US 63009105 A 20050611