

Title (en)

CIRCUIT FOR REDUCING SWITCHING LOSSES IN ELECTRONIC VALVES

Title (de)

SCHALTUNG ZUR REDUKTION DER SCHALTVERLUSTE ELEKTRONISCHER VENTILE

Title (fr)

CIRCUIT POUR REDUIRE LES PERTES DE COMMUTATION DE SOUPAPES ELECTRONIQUES

Publication

EP 1275203 A1 20030115 (DE)

Application

EP 01923373 A 20010412

Priority

- AT 0100106 W 20010412
- AT 6362000 A 20000412

Abstract (en)

[origin: WO0180425A1] The invention relates to a circuit for reducing switching losses in electronic valves, wherein a saturation coil (2) for reducing switching losses is mounted in series relative to the electronic valve (1). In order to reduce losses as effectively as possible both during connection and disconnection, an electronic auxiliary valve (3) is connected in parallel to the electronic valve (1) by means of a capacitor (4) and a serial circuit consisting of at least one inductive resistor (6) and a diode (7) is mounted in parallel to the electronic auxiliary valve (3) valve for discharging the capacitor (4), wherein the electronic auxiliary valve (3) is triggered before the electronic valve (1) is disconnected so that the auxiliary valve (3) absorbs the current flowing through the electronic valve (1), thereby minimizing power loss of the electronic valve (1) during disconnection. A saturation coil (5) for reducing the connection losses of the auxiliary valve is also advantageously mounted in series relative to said auxiliary valve (3).

IPC 1-7

H03K 17/0814

IPC 8 full level

H03K 17/0814 (2006.01)

CPC (source: EP)

H03K 17/0814 (2013.01)

Citation (search report)

See references of WO 0180425A1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

WO 0180425 A1 20011025; AU 5014401 A 20011030; EP 1275203 A1 20030115

DOCDB simple family (application)

AT 0100106 W 20010412; AU 5014401 A 20010412; EP 01923373 A 20010412