

Circuit Device

Title of invention: Circuit Device

Inventors: Tadao KUBOKI, Shuichi TAKIOKA, Changlong XU, Tomoyoshi YUYAMA,
Takashi HORIKOSHI

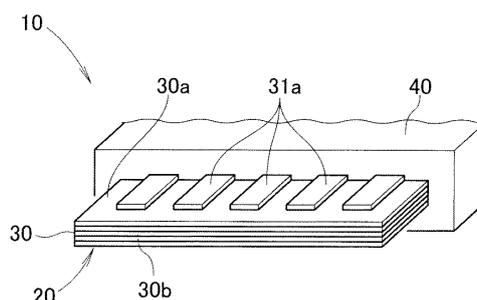
Appl. No.: JP2016-68594 (2016/3/30)

Pub. No.: JP2017-183519 (2017/10/5)

Pat. No.: JP6267738 (2018/1/5)

ABSTRACT

A circuit device 10 includes a substrate 30 formed with an edge connector 20, and a resin portion 40 formed integrally with the substrate 30 so as to allow the edge connector 20 to be exposed. The substrate 30 has a core layer 32 and pattern layers 33a, 33b arranged on upper and lower sides of the core layer 32. The pattern layers 33a, 33b are formed to extend over both of the edge connector 20 and the resin portion 40. Further, the pattern layers 33a, 33b are formed symmetrically to each other with respect to the core layer 32 interposed there between.



Mold and Circuit Device

Title of invention: Mold and Circuit Device

Inventors: Changlong XU

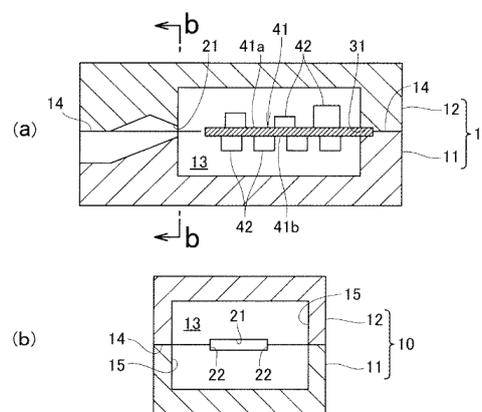
Appl. No.: JP 2016-68245 (2016/3/30)

Pub. No.: JP2017-177540 (2017/6/29)

Pat. No.: JP6166413 (2017/7/19)

ABSTRACT

Provided is a mold 10 for transfer molding comprising a lower mold 11 and an upper mold 12. The lower mold 11 and the upper mold 12 are molds that, when clamped to each other, comprise a cavity 13 to mold resin and a gate 21 to supply the resin to the cavity 13. The gate 21 is formed on both sides across a parting surface 14 between the two clamped molds. The gate 21 is formed with plane-symmetry across the parting surface 14, and an upstream part of a flow path connected to the gate 21 is formed in only one of the two molds and is exposed at the parting surface 14.



Light Illumination Control Device

Title of invention: Light Illumination Control Device

Inventors: Hideto TSUKAGOSHI

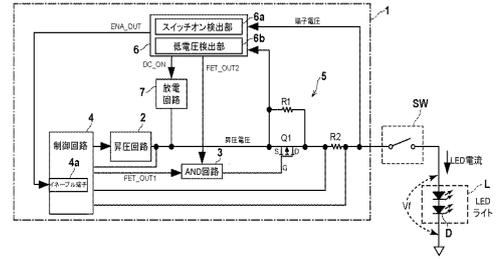
Appl. No.: JP2016-63726 (2016/3/28)

Pub. No.: JP2017-182903 (2017/10/5)

Pat. No.: JP6247712 (2017/11/24)

ABSTRACT

In this light illumination control device (1), when an external switch (SW) is switched from an OFF state to an ON state, a switch-on detection unit (6a) detects that a difference value, between a boost circuit (2) output voltage value and a light-emitting diode (D) forward voltage value, has reached a predetermined voltage value or greater, causing a microcontroller (6) to stop the boosting operation of the boost circuit (2), thereby bringing the boost circuit (2) output voltage value to a value lower than the light-emitting diode (D) forward voltage value.



Discharge Control Device

Title of invention: Discharge Control Device

Inventors: Ryutaro MINESAWA, Ikuo SASANUMA

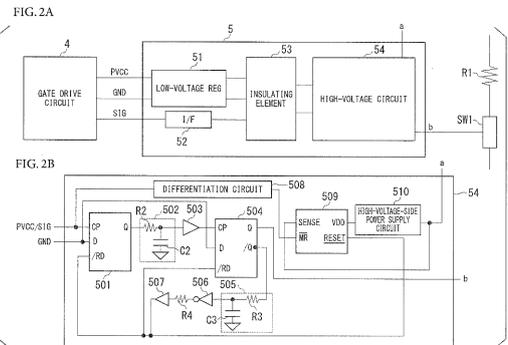
Appl. No.: JP2015-250305 (2015/12/22)

Pub. No.: JP2017-118650 (2017/6/29)

Pat. No.: JP6357722 (2018/6/29)

ABSTRACT

A discharge control device includes a discharge circuit configured to include a switch and a resistor to discharge charges of a smoothing capacitor and a power converter which are connected to a high-voltage power supply. The discharge circuit sets the switch to an ON state to start the discharging for a fixed period when an ignition switch is changed from the ON state to an OFF state. The discharge circuit sets the switch to the OFF state to stop the discharging when the ignition switch is changed from the OFF state to the ON state during a period in which the discharge circuit performs the discharging.



Electromagnetic Fuel Injection Valve

Title of invention: Electromagnetic Fuel Injection Valve

Inventors: Takahiro YASUDA, Junichi MIYASHITA, Masateru MORIYA, Yasuhiko NABESHIMA,
Kousaku YOTORIYAMA

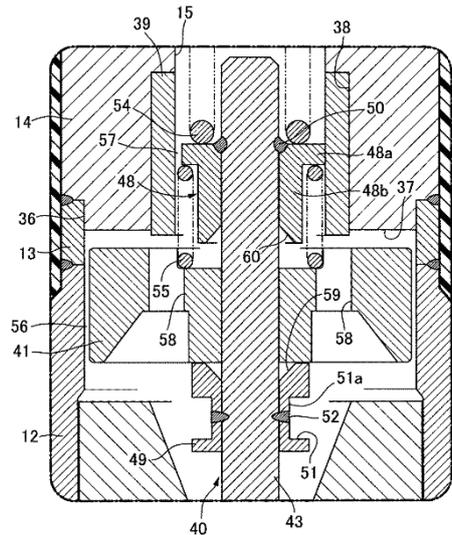
Appl. No.: JP2015-227443 (2015/11/20)

Pub. No.: JP2017-96131 (2017/6/1)

Pat. No.: JP6175475 (2017/7/14)

ABSTRACT

An electromagnetic fuel injection valve wherein a movable core disposed opposing an attracting face of a fixed core is slidably fitted onto a stem forming a valve body together with a valve part operating in cooperation with a valve seat, a valve-open side stopper is fixed to the stem so that, by making the movable core, that is attracted to the face when energizing a coil, abut against this stopper, the body is operated to open, and a valve-closed side stopper is fixed to the stem further on the seat side than the other stopper so as to restrict a stroke of the movable core between these stoppers. At least an end part of one of the valve-closed side stopper and the movable core, the end part being on a side of the other one thereof, is formed to gradually decreasing its cross-sectional area in going toward the other one.



Vehicle Air Conditioning Device

Title of invention: Vehicle Air Conditioning Device And Assembly Method Therefor

Inventors: Minoru IDO, Ryota KAMADA

Appl. No.: JP2016-64043 (2016/3/28)

Pub. No.: JP2017-177871 (2017/10/5)

Pat. No.: JP6262790 (2017/12/22)

ABSTRACT

In an air conditioner case (12) of a vehicle air conditioning device (10), a holder (24) is disposed on a side wall of the air conditioner case (12) so as to face toward a space (44) on a rear end side of a blower (14). An actuator (22) for driving first and second switching dampers (48, 52) is mounted on the holder (24). As viewed from an axial direction of a motor (42), the actuator (22) is arranged so as to overlap with the motor (42).

