United States Patent [19]

Yamazaki et al.

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[54] **EVAPORATIVE FUEL PROCESSING DEVICE**

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[21] Appl. No.: **317,804**

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[30] **Foreign Application Priority Data**

Oct. 4, 1993 [JP] Japan 5-248245

[51] **Int. Cl.⁶** F02M 33/02
[52] **U.S. Cl.** 123/520; 123/519
[58] **Field of Search** .... 123/520, 521, 123/518, 519, 516, 198 D; 55/387

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Attorney, Agent, or Firm—Nikaido, Marmelstein, Murray & Oram

[57] **ABSTRACT**

In an evaporative fuel processing device, a canister is divided into first, second, third and fourth chambers by partition walls. A control valve is provided in a communication passage which connects the second and third chambers to each other. A first charge passage is connected to an upper space in a fuel tank and to a port in the third chamber, and a second charge passage is connected to a fuel supply valve for the fuel tank and to a port in the first chamber. Further, a purge passage is connected to an intake passage of an internal combustion engine and to a port in the first chamber. The control valve is connected to an electronic control unit, and opened during refueling and during traveling of a vehicle and closed during parking of the vehicle. Thus, it is possible to reliably prevent an evaporative fuel from being released to the atmosphere, while the capacity of the canister to a minimum.
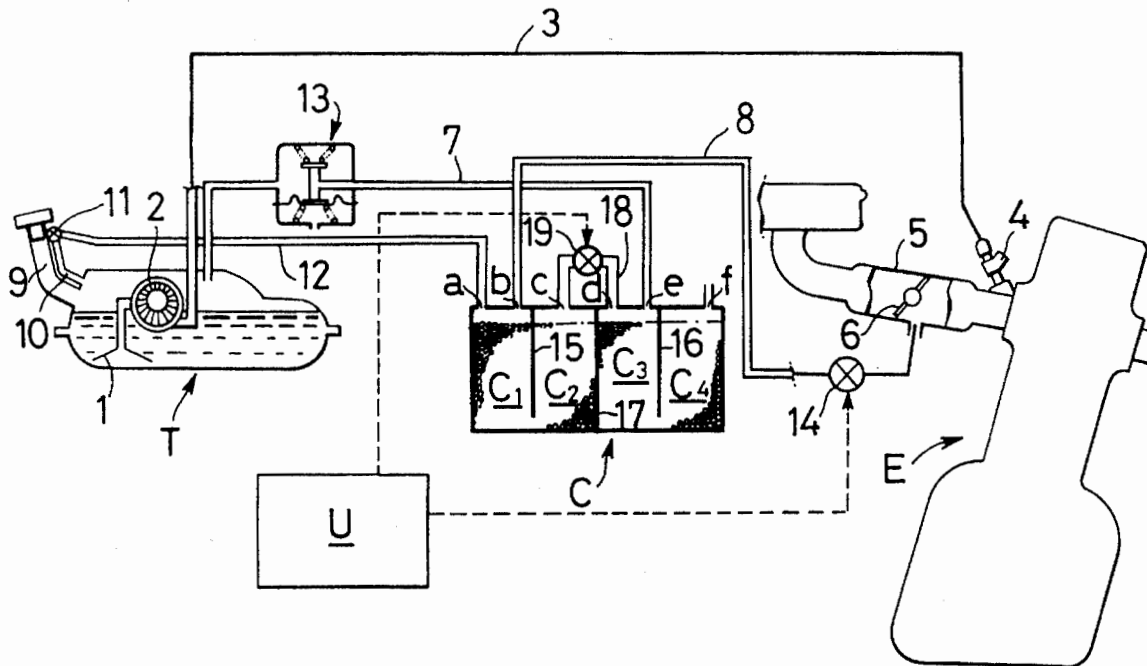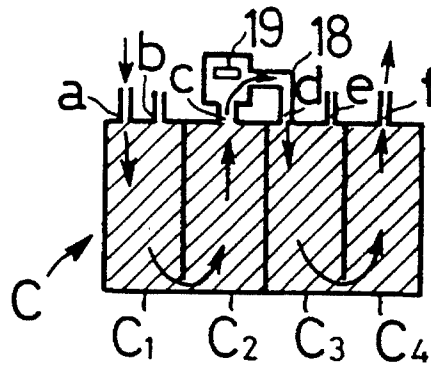
5 Claims, 7 Drawing Sheets

FIG.1

FIG.2A

FIG.2B

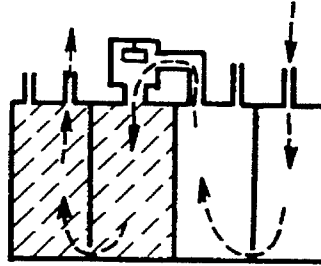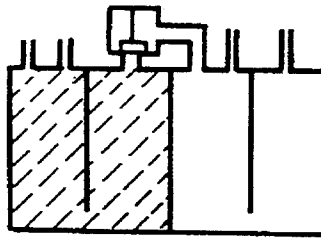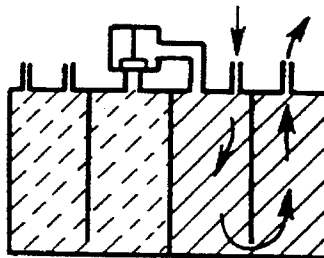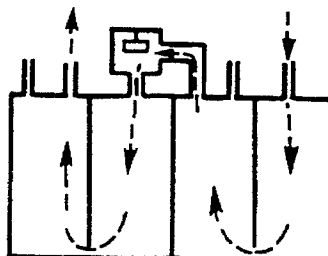FIG.2C

FIG.2D

FIG.2E

FIG.3

FIG.4A
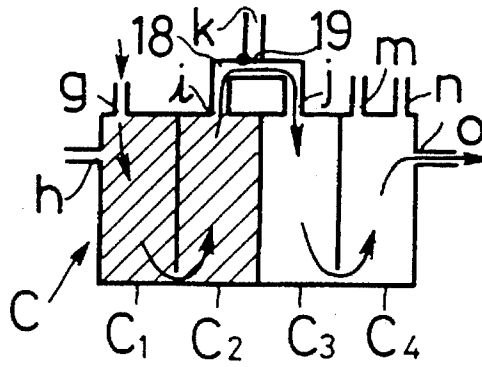
FIG.4B
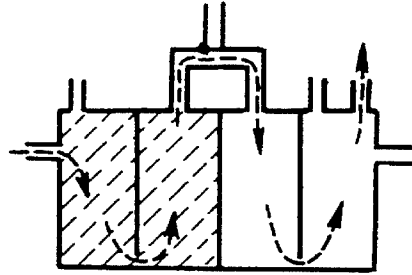
FIG.4C

FIG.4D

FIG.4E

DOCKET ALARM
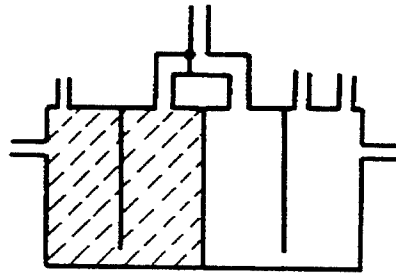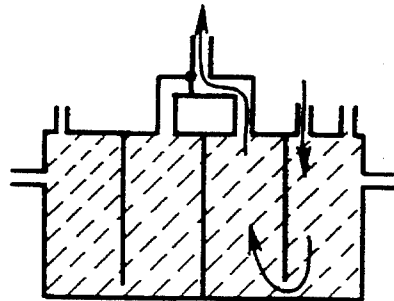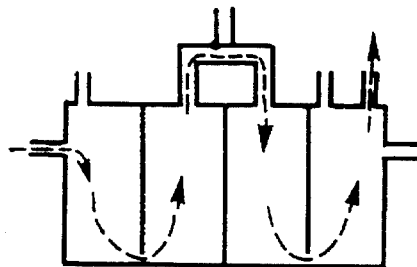
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