



US005456236A

United States Patent [19][11] **Patent Number:** **5,456,236****Wakashiro et al.**[45] **Date of Patent:** **Oct. 10, 1995**[54] **EVAPORATIVE EMISSION CONTROL SYSTEM FOR INTERNAL COMBUSTION ENGINES**

5,209,210 5/1993 Ikeda et al. 123/516

FOREIGN PATENT DOCUMENTS

1-159455 6/1989 Japan .

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Attorney, Agent, or Firm—Nikaido, Marmelstein, Murray & Oram[73] Assignee: **Honda Giken Kogyo Kabushiki Kaisha,** Tokyo, Japan[57] **ABSTRACT**[21] Appl. No.: **335,373**[22] Filed: **Nov. 3, 1994**[30] **Foreign Application Priority Data**

Nov. 4, 1993 [JP] Japan 5-298931

[51] Int. Cl.⁶ **F02M 25/08**[52] U.S. Cl. **123/519**[58] Field of Search 123/516, 518,
123/519, 520[56] **References Cited****U.S. PATENT DOCUMENTS**

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An evaporative emission control system for an internal combustion engine includes a canister for adsorbing evaporative fuel generated in the fuel tank, a first introducing passage for introducing evaporative fuel generated in the fuel tank into the canister on an occasion other than at refueling, a purging passage for purging evaporative fuel adsorbed in the canister into the intake passage of the engine, and a first air-inlet passage communicating between the canister and the atmosphere. First and second adsorbent chambers are formed in the canister and each accommodating an adsorbent. The first introducing passage and the purging passage are connected to the first adsorbent chamber. The first air-inlet passage is connected to the second adsorbent chamber. A communication passage communicates between the first adsorbent chamber and the second adsorbent chamber. A second introducing passage is connected to the first and second adsorbent chambers, for introducing evaporative fuel generated in the fuel tank into the canister at refueling. A second air-inlet passage communicates between the first adsorbent chamber and the atmosphere. An electromagnetic valve is arranged across the second introducing passage, for opening the same at refueling.

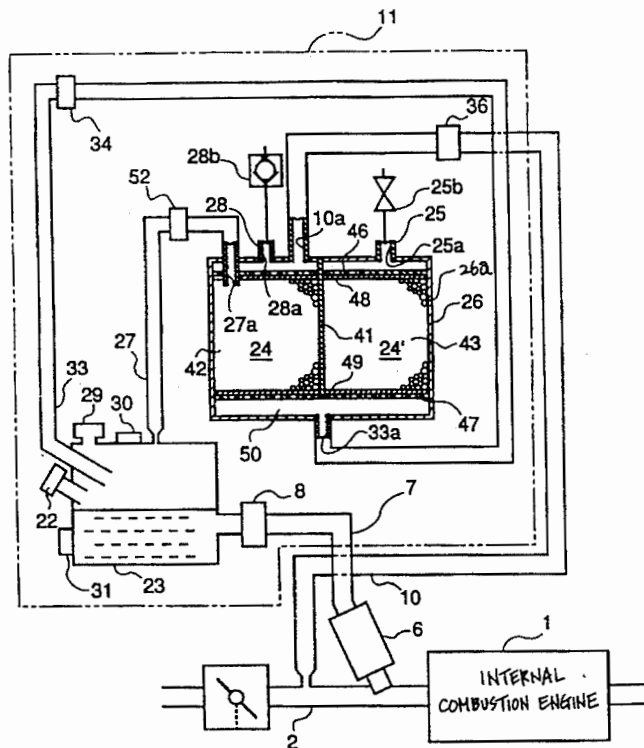
12 Claims, 9 Drawing Sheets

FIG. 1

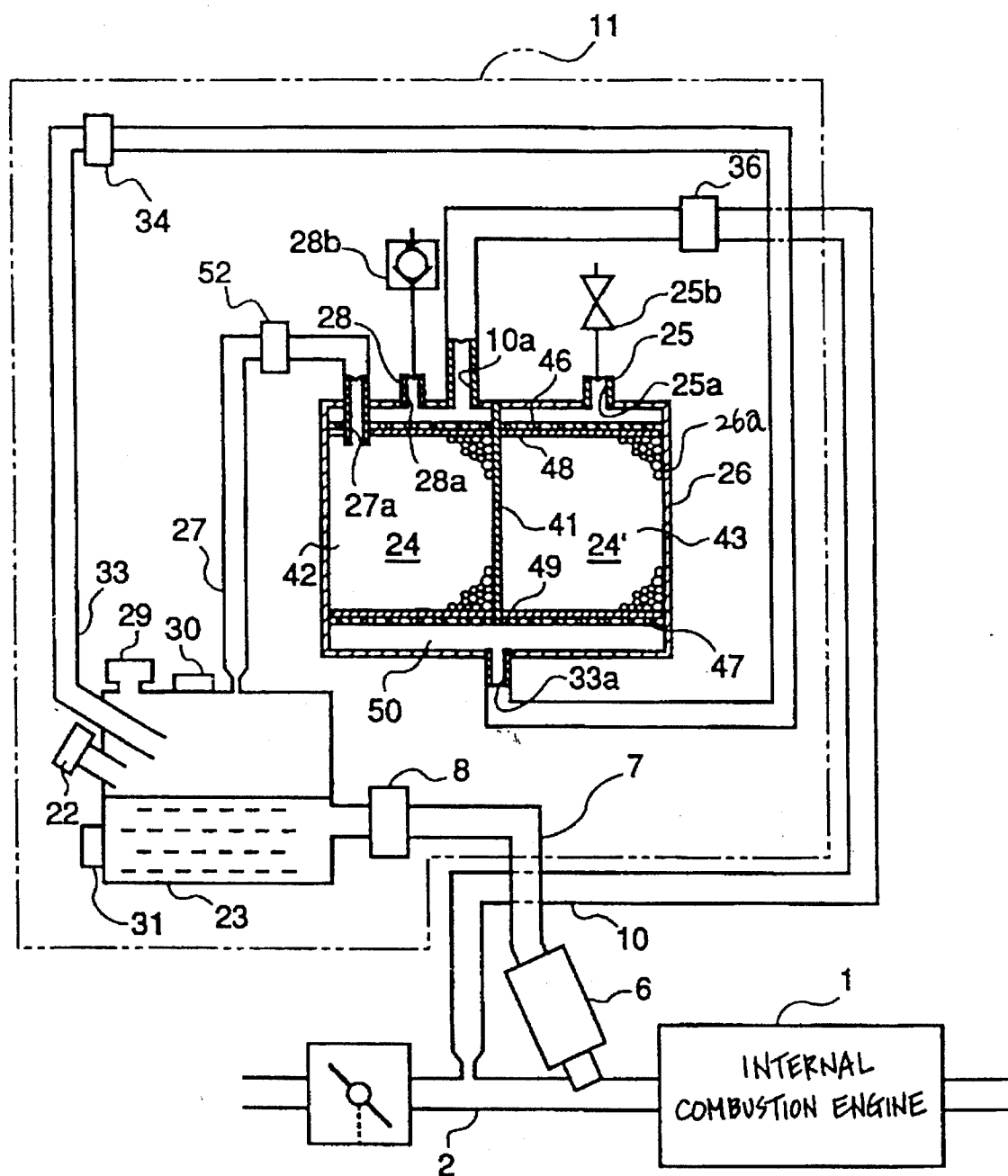


FIG. 2

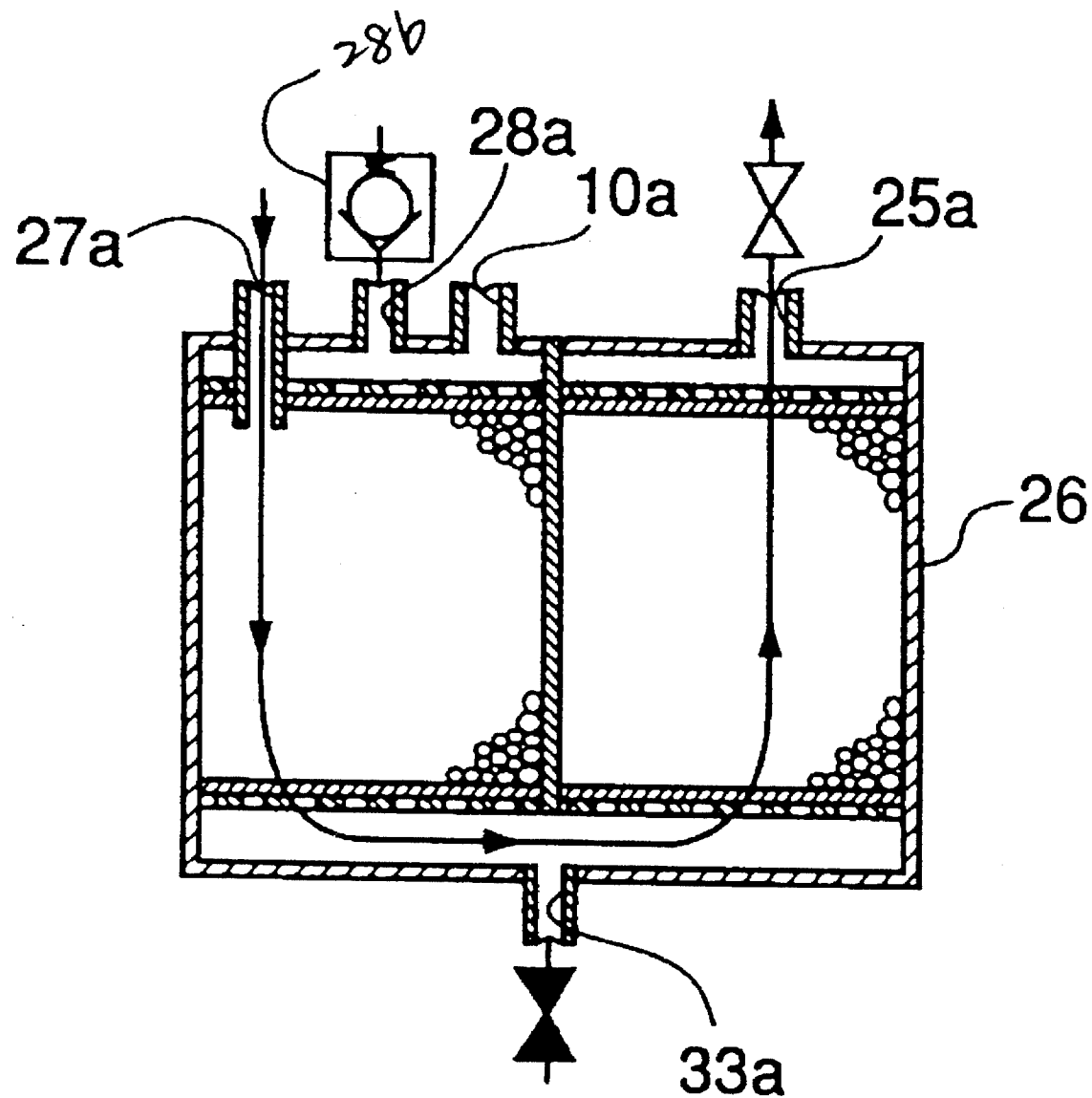


FIG. 3

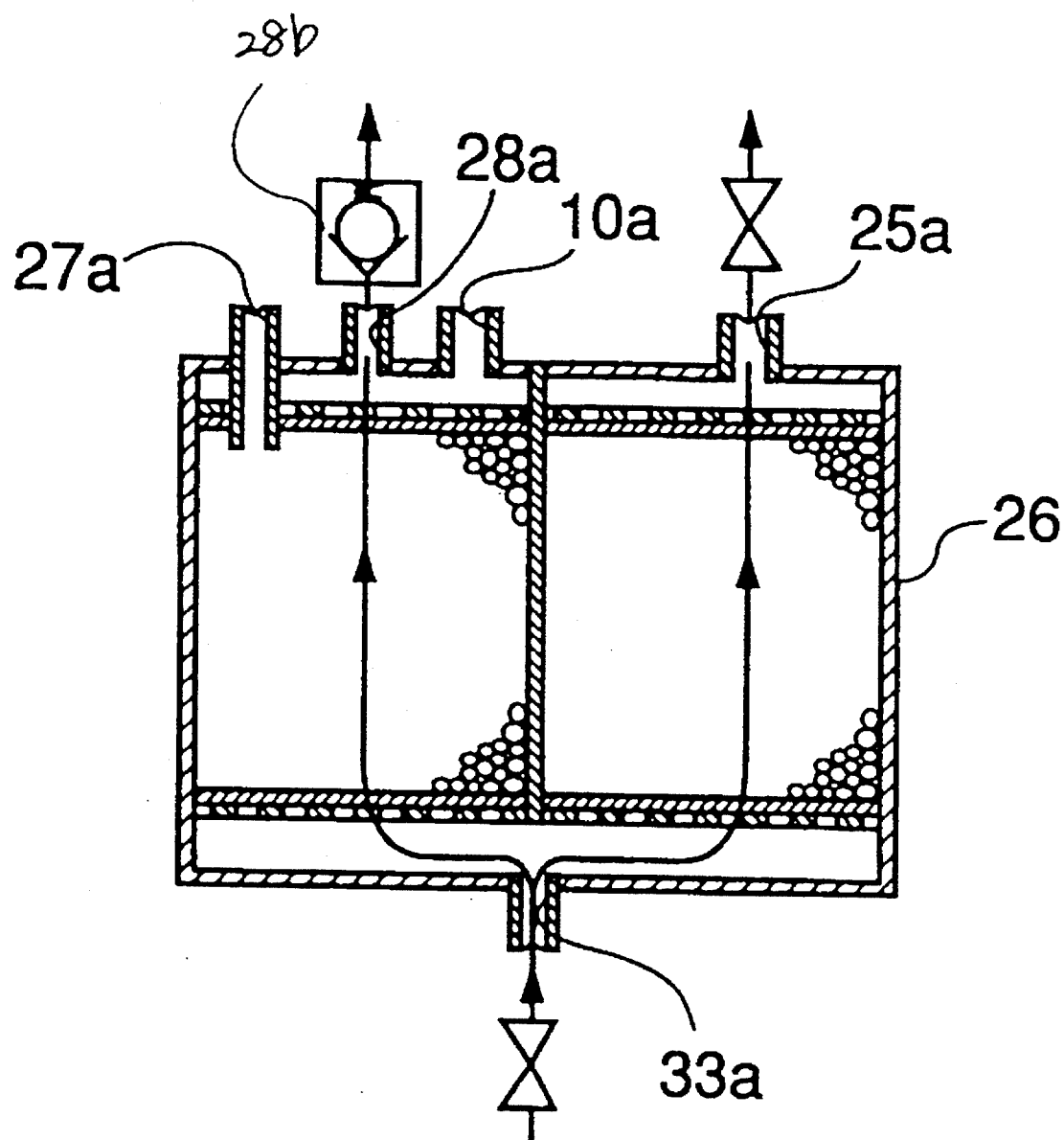
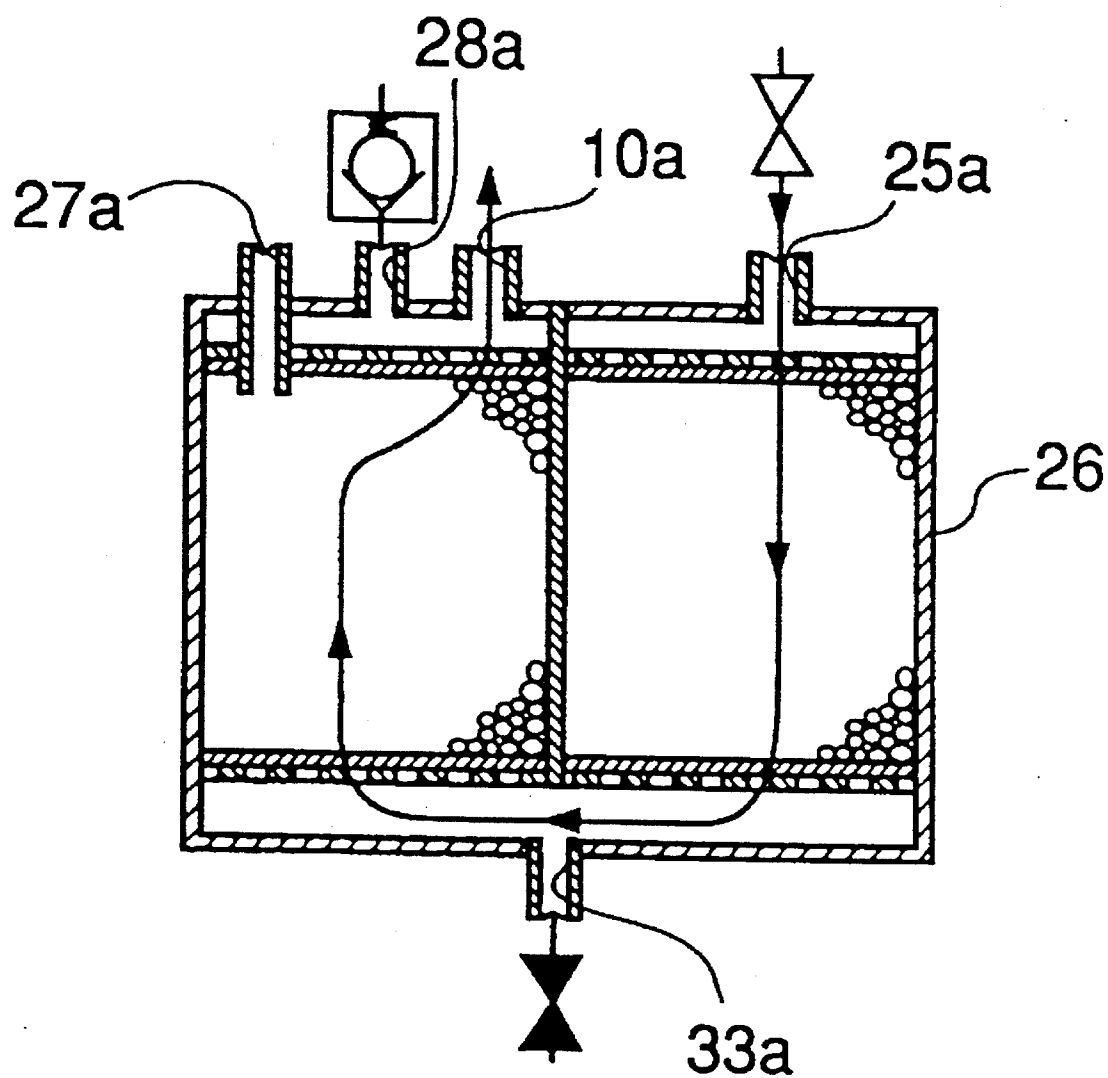


FIG. 4





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