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United States Patent [19]

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Okano et al.

[45] Date of Patent: **Feb. 29, 2000**

[54] VOICE START RECORDING APPARATUS

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[73] Assignee: **Olympus Optical Co., Ltd.**, Tokyo, Japan

[21] Appl. No.: **08/690,158**

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[22] Filed: **Jul. 19, 1996**

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[30] Foreign Application Priority Data

Jul. 19, 1995	[JP]	Japan	7-183073
Aug. 3, 1995	[JP]	Japan	7-198741
Aug. 8, 1995	[JP]	Japan	7-201933

Primary Examiner—Vivian Chang
Attorney, Agent, or Firm—Louis Weinstein

[51] Int. Cl.⁷ **H04R 29/00**

[52] U.S. Cl. **381/56; 381/110**

[58] Field of Search 381/56, 110; 704/210, 704/215, 233, 231; 379/88.01

[57] ABSTRACT

A voice start recording apparatus includes a voice level determining circuit for determining whether consecutive frames of input voice is sound or silent, each frame being a coded voice signal; a continuity monitoring circuit for monitoring continuity of sound frames or silent frames; and a recording control circuit for controlling the start and stop of a recording operation based on the output from the continuity monitoring circuit.

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12 Claims, 14 Drawing Sheets

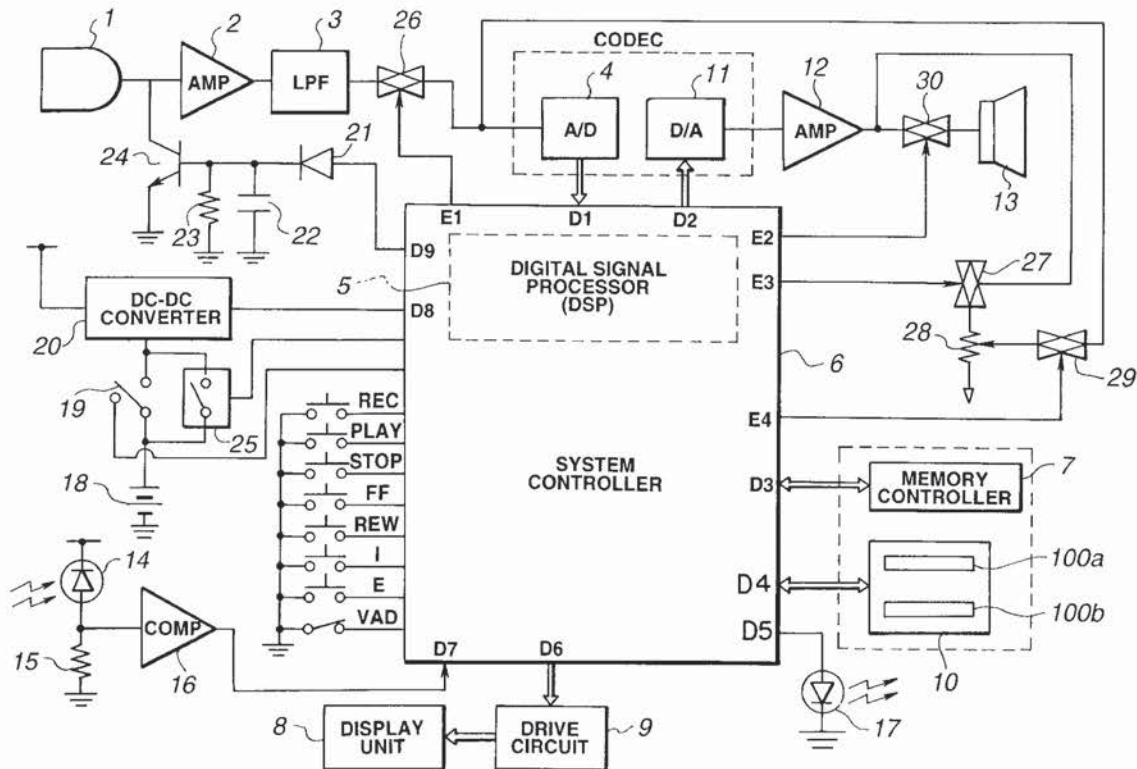


FIG.2

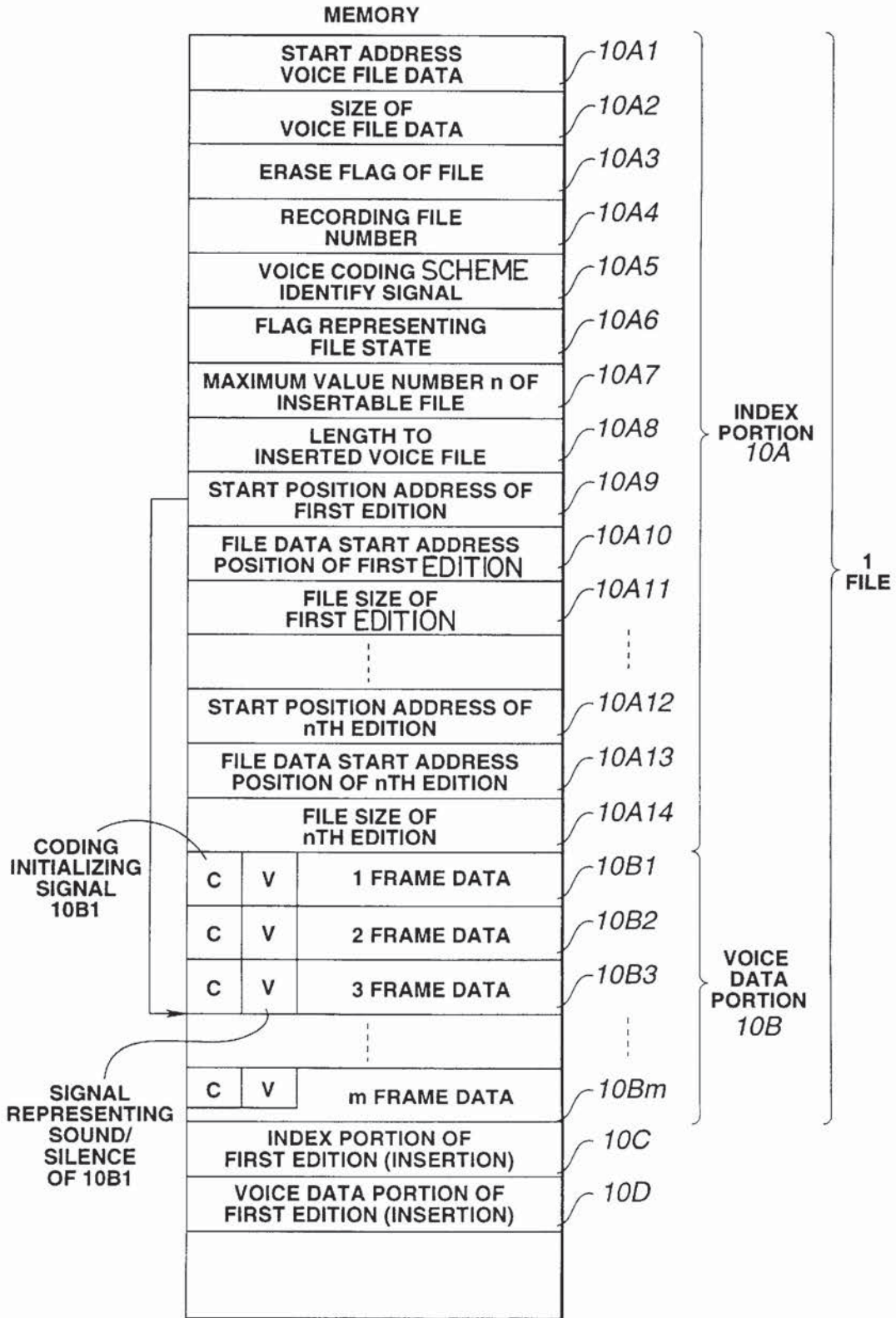


FIG.3

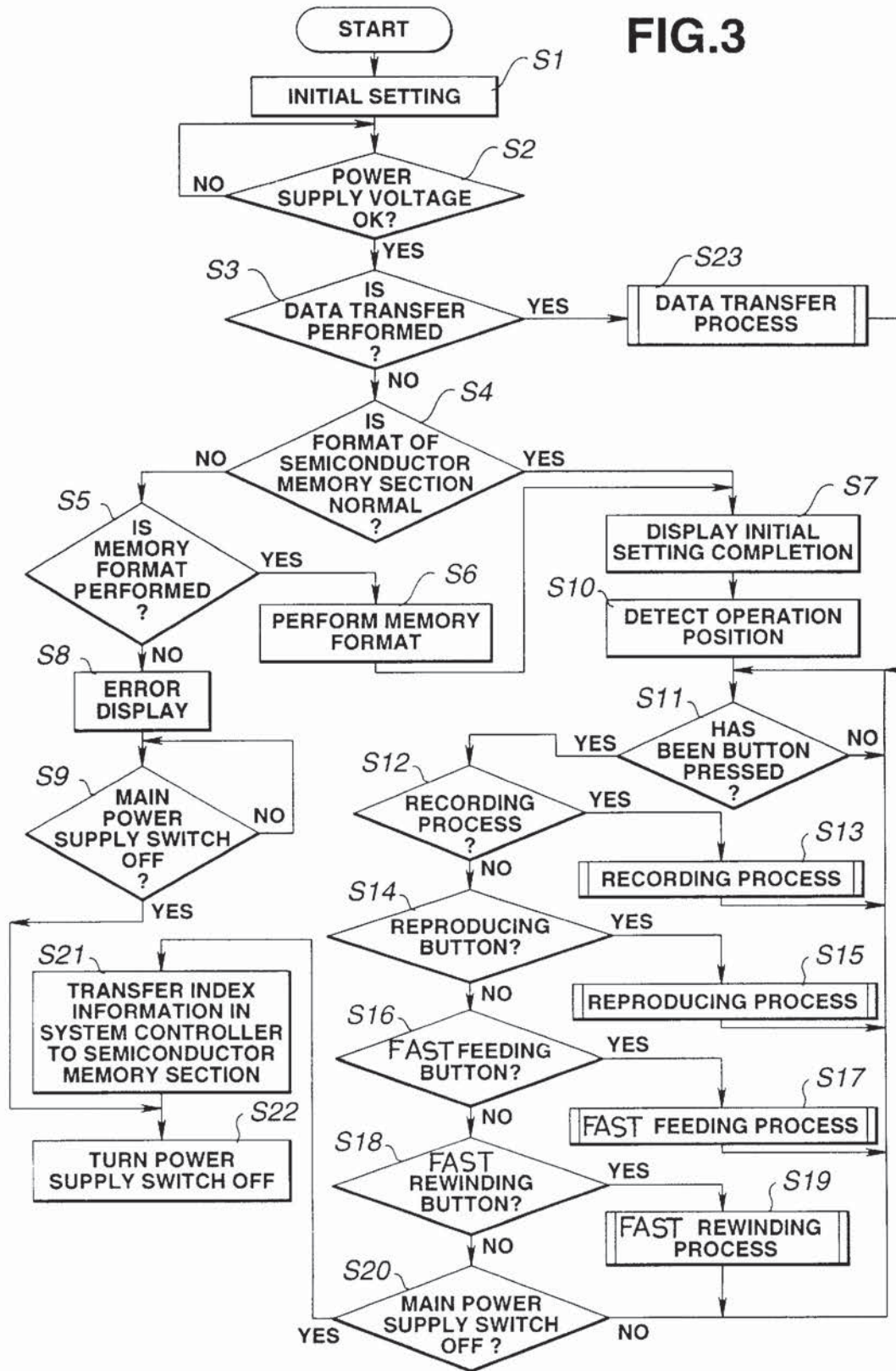
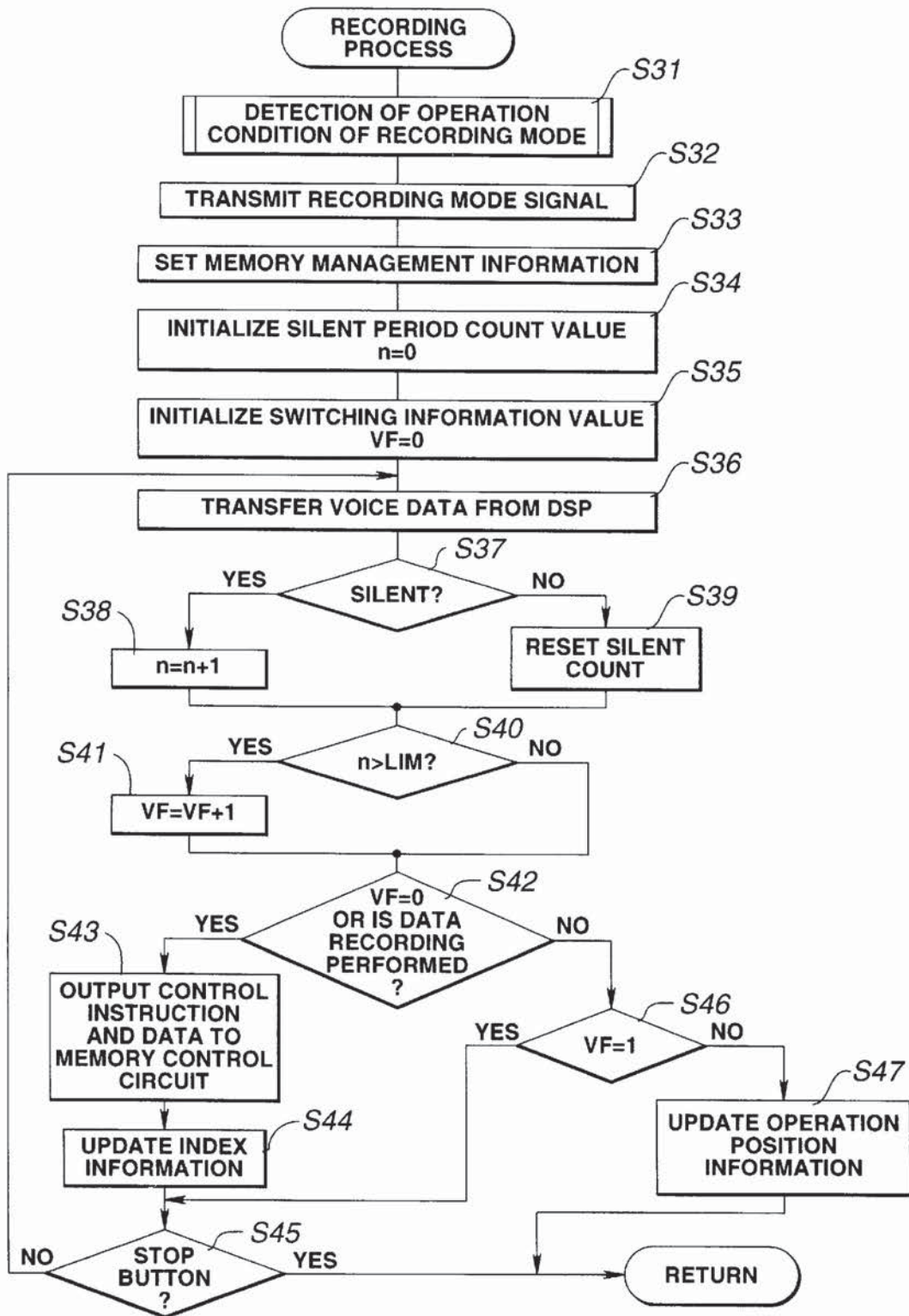


FIG.4



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