# United States Patent [19]

## Hashemi et al.

### [54] TELEPHONE CONFERENCE SYSTEM WITH ACTIVE ANALOG CONFERENCE

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- [21] Appl. No.: 832,788
- [22] Filed: Sep. 12, 1977
- [51] Int. Cl.<sup>2</sup> ..... H04M 3/56
- [52] U.S. Cl. ..... 179/1 CN; 179/18 BC
- [58] Field of Search ..... 179/1 CN, 1 VC, 18 BC, 179/1 HF, 170 D

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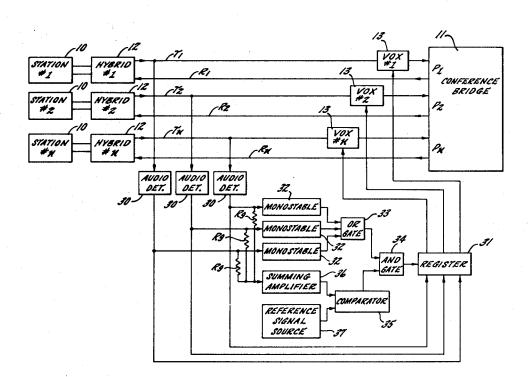
## [11] **4,139,731** [45] **Feb. 13, 1979**

### ABSTRACT

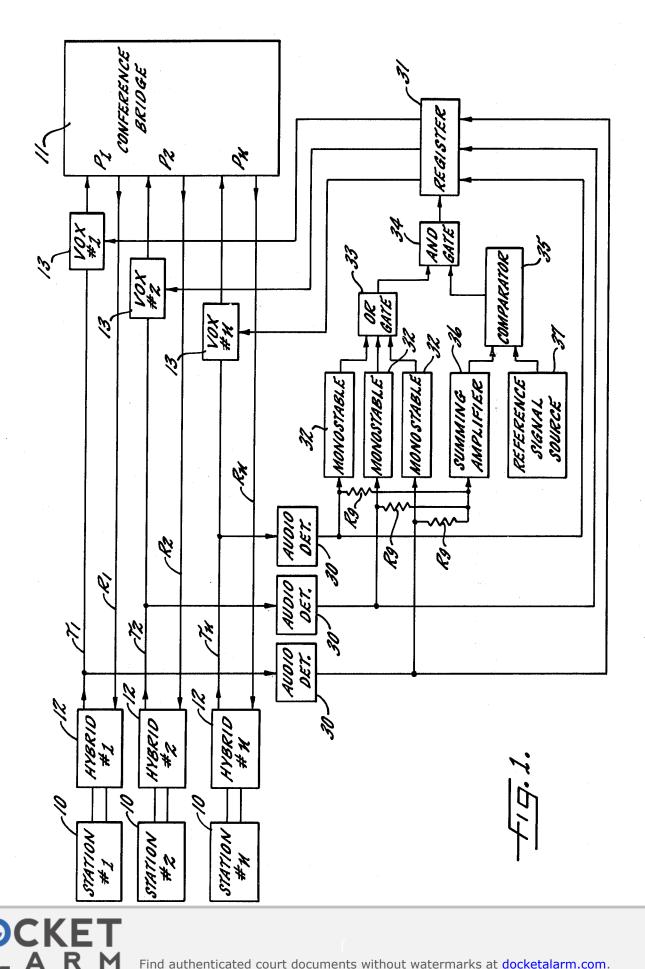
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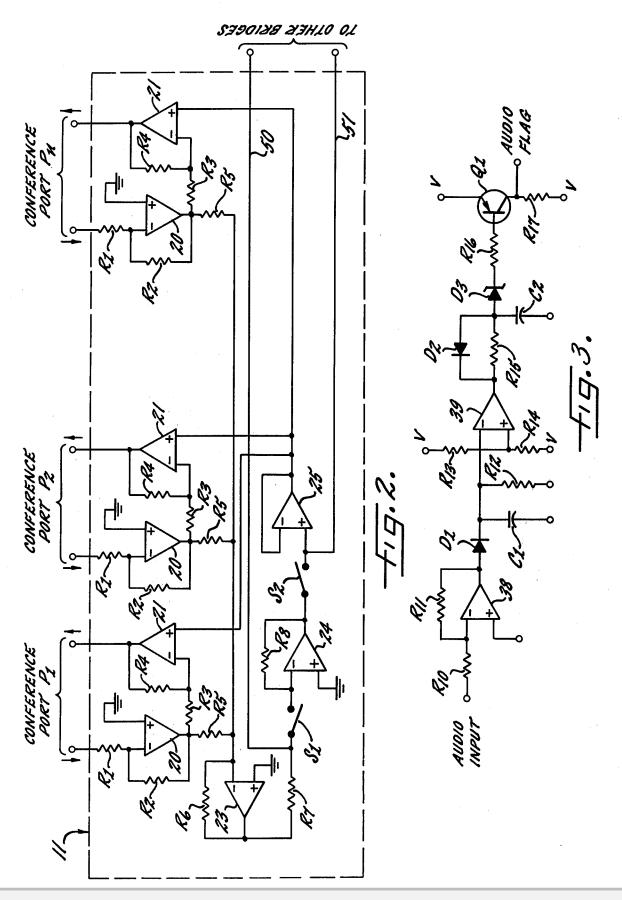
A telephone conference system includes a conference bridge for coupling multiple conference ports associated with corresponding conference stations. The bridge includes means for summing incoming signals from all the conference ports and supplying the summed signals to all the conference ports. A differential amplifier is connected to each of the conference ports and differentially receives (1) incoming signals at the corresponding conference port and (2) the output of the summing means so as to cancel from the output of the summing means any signal received by the summing means from the corresponding conference port. Thus, the differential amplifier passes only that portion of the output of the summing means that is received from conference ports other than the particular port to which that differential amplifier is connected. A voice actuated switch is connected to each conference port for controlling the transmission of incoming audio signals to the respective ports, and the number of switches that can be closed at the same time is limited to a preselected maximum, while permitting the continuous transmission of outgoing audio signals from all the ports regardless of which switches are open or closed.

### 9 Claims, 5 Drawing Figures



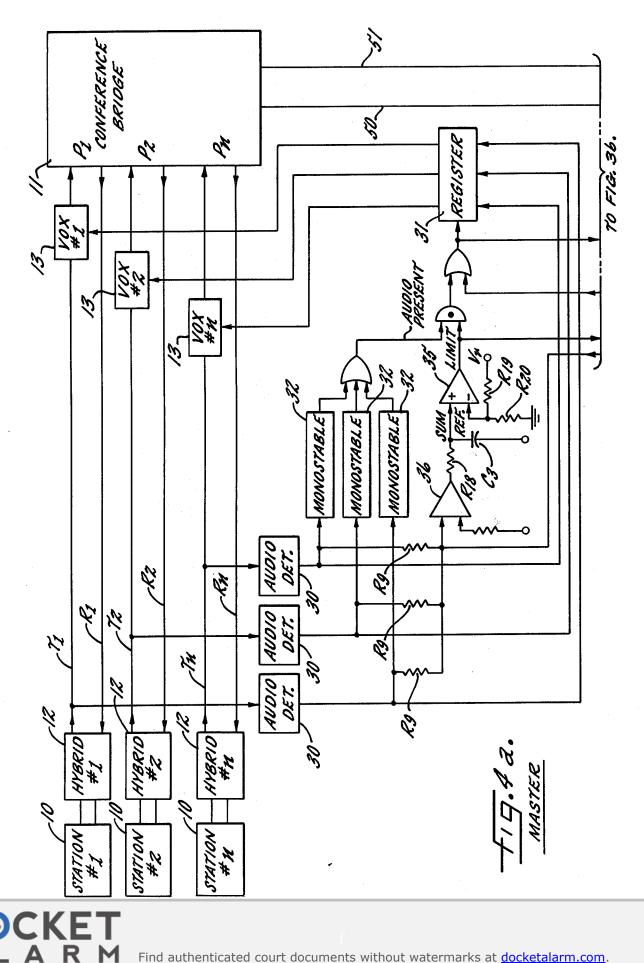
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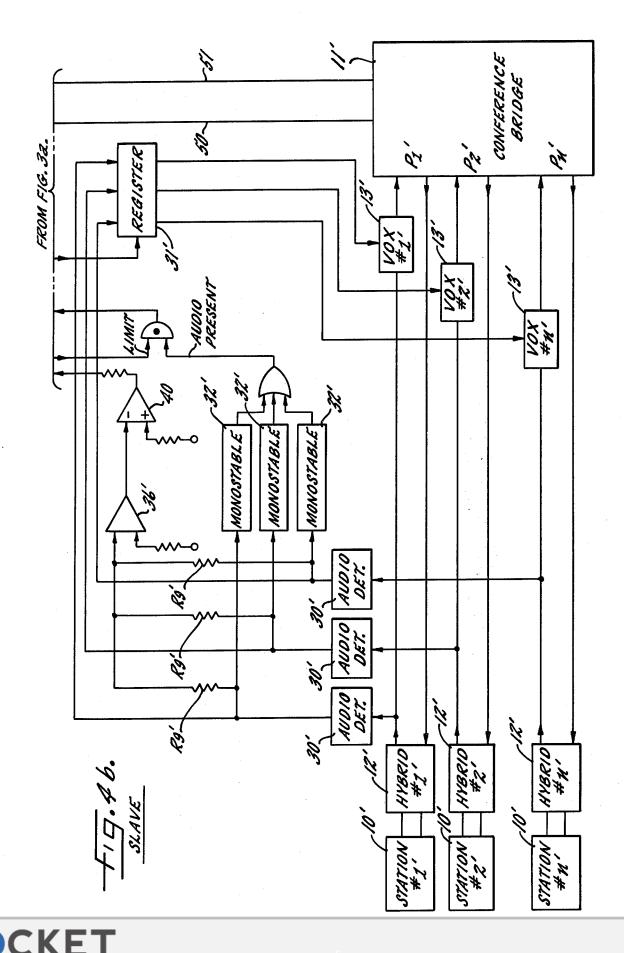
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