

[54] LOCKING DEVICE FOR VEHICLES

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[58] Field of Search 364/424.05; 340/542, 340/543, 63, 64, 825.31, 825.32, 825.54, 825.69; 361/171, 172; 180/287; 70/257, 277; 307/10 AT; 235/382

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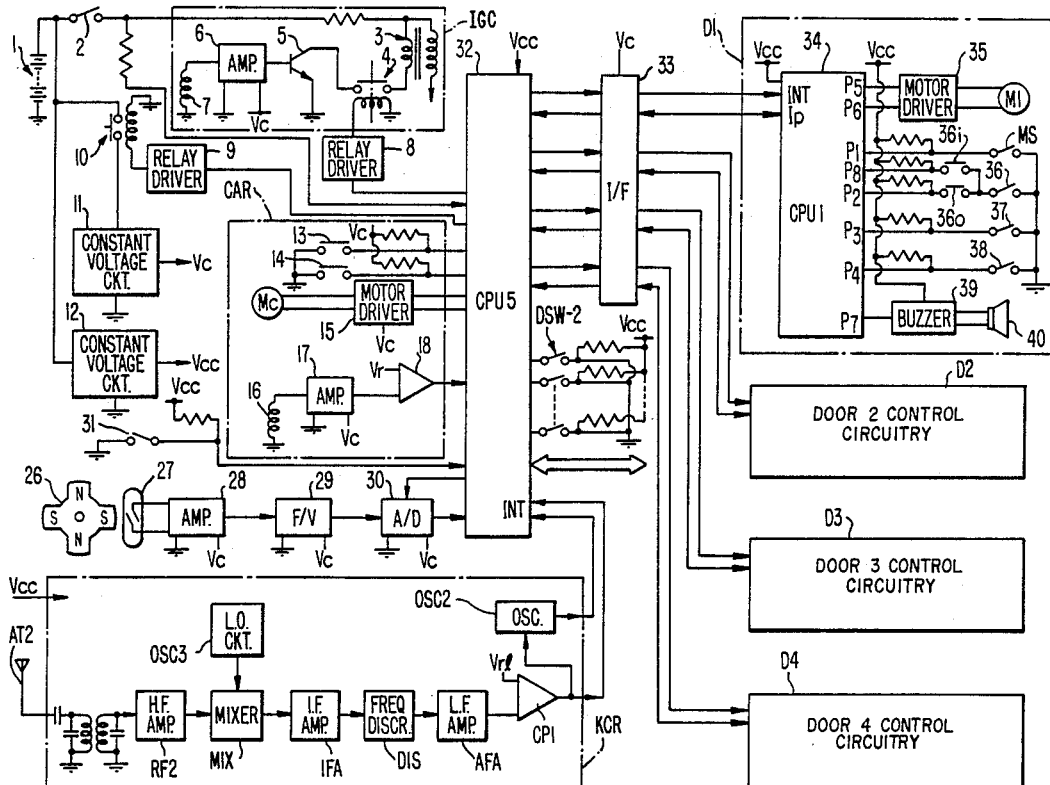
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Assistant Examiner—Ellis B. Ramirez
Attorney, Agent, or Firm—Finnegan, Henderson, Farabow, Garrett & Dunner

[57] ABSTRACT

A locking device for vehicles includes a card including a microprocessor and a transmitter for generating and transmitting commands for locking and unlocking the doors of a motor vehicle. A lock control device includes a microprocessor and a receiver for receiving the commands transmitted by the lock command device. The lock control device will only carry out a receive command if the command is applied to a specific motor vehicle and the motor vehicle is in the proper state to implement the command. Change data is generated by the lock control device and transmitted to the lock command device to change the value of the next subsequent lock command so that the lock command can be uniquely identified with the motor vehicle.

9 Claims, 16 Drawing Sheets



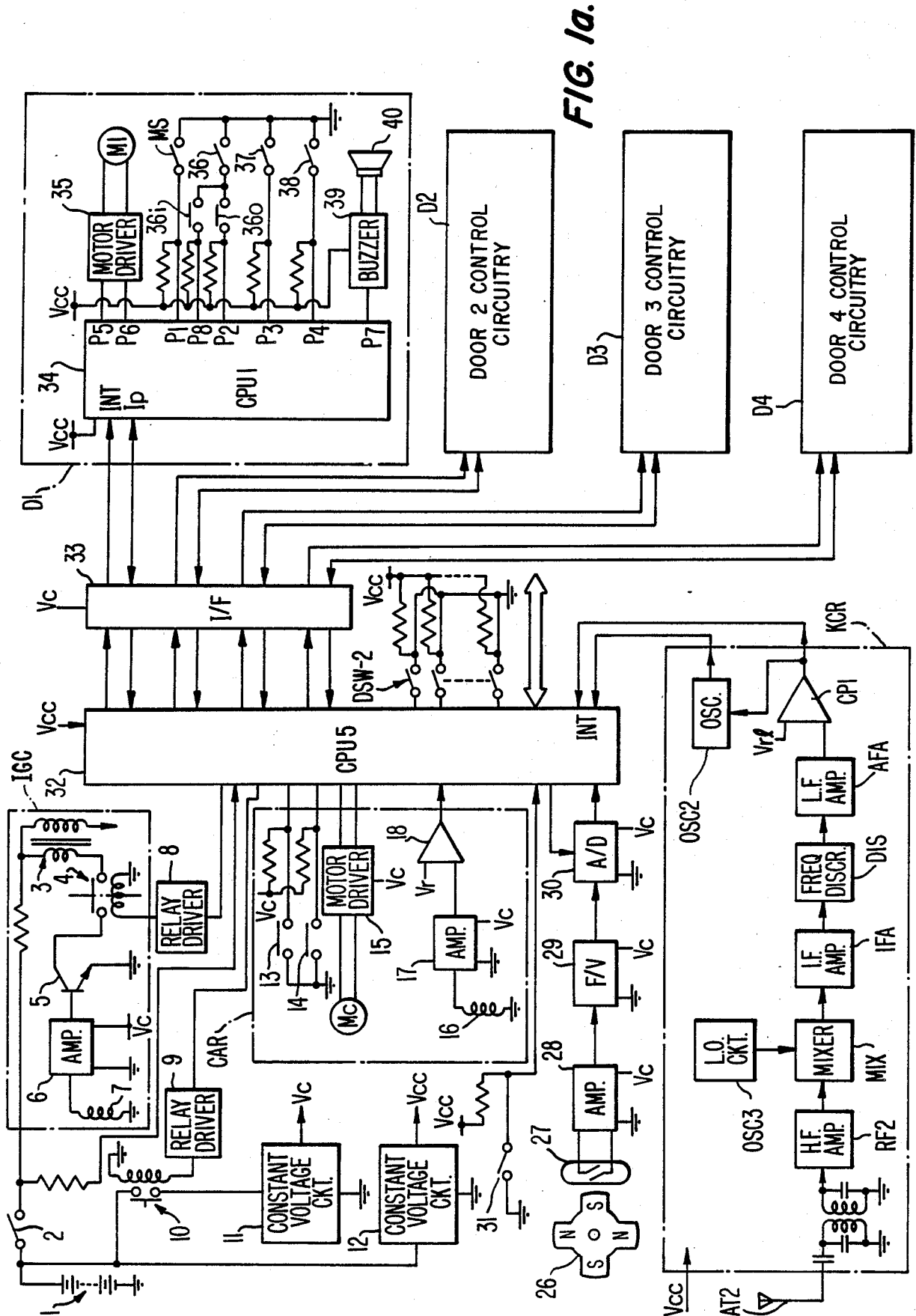


FIG. 1a.

FIG. 1b.

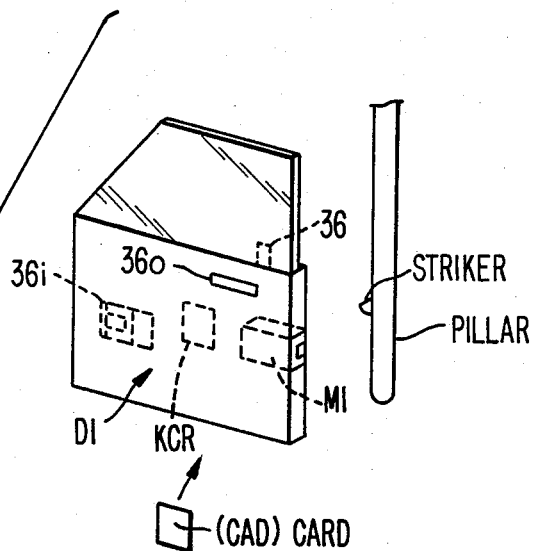


FIG. 2.

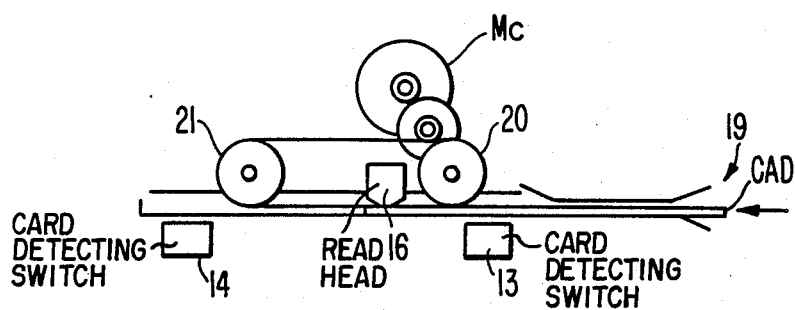


FIG. 3a.

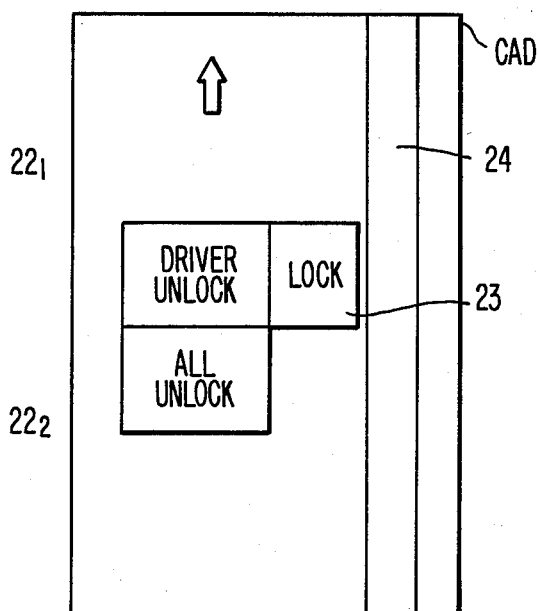


FIG. 3b.

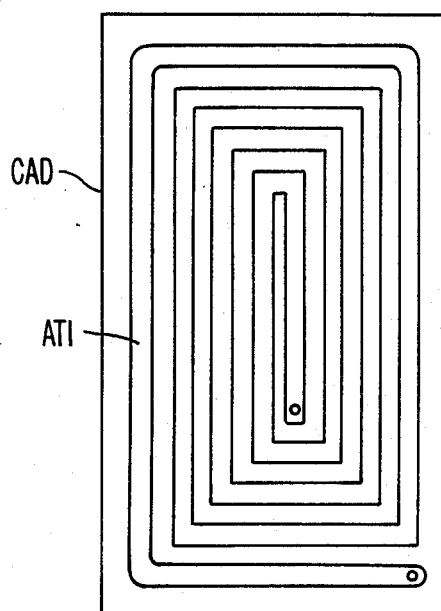


FIG. 3c.

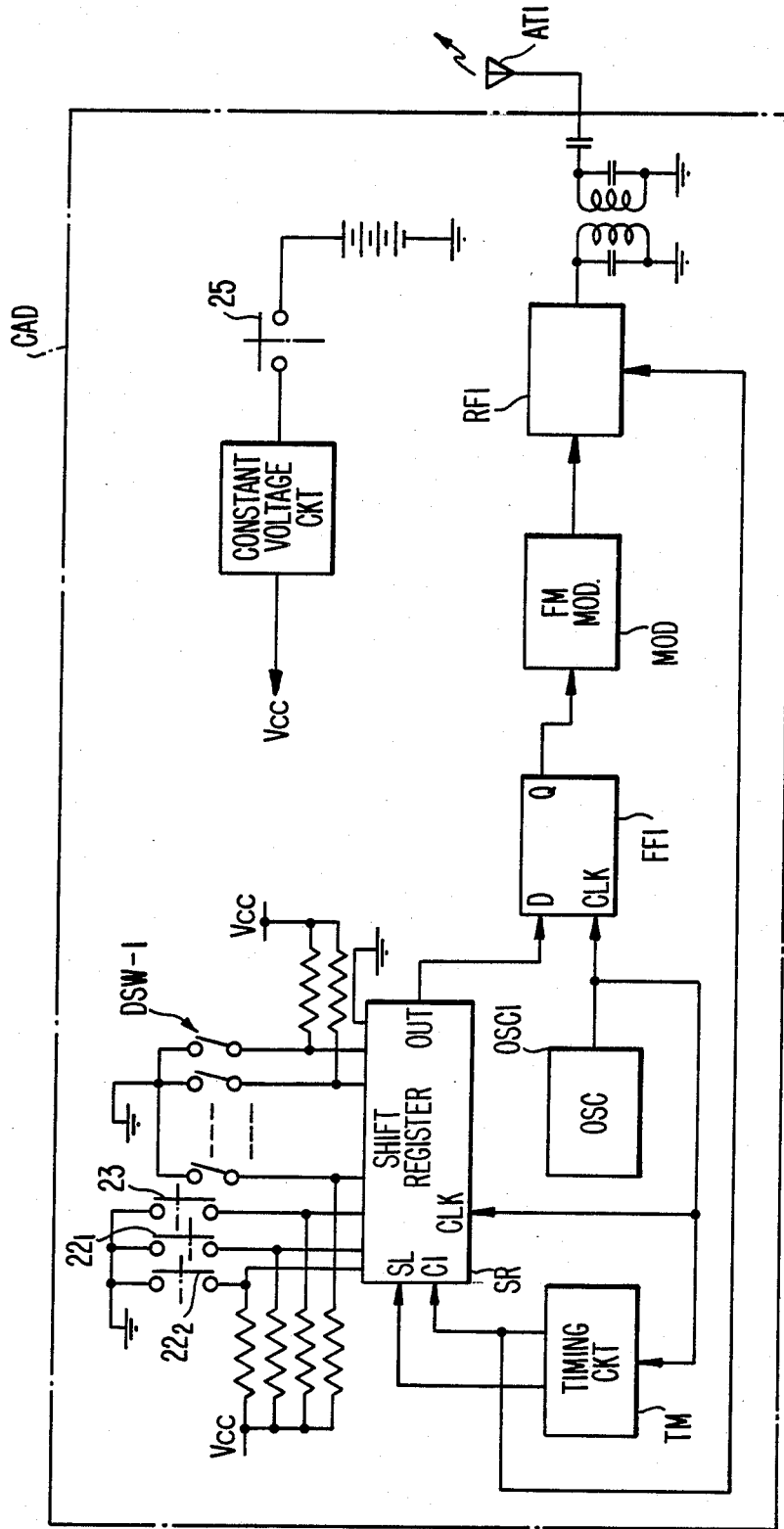


FIG. 4.

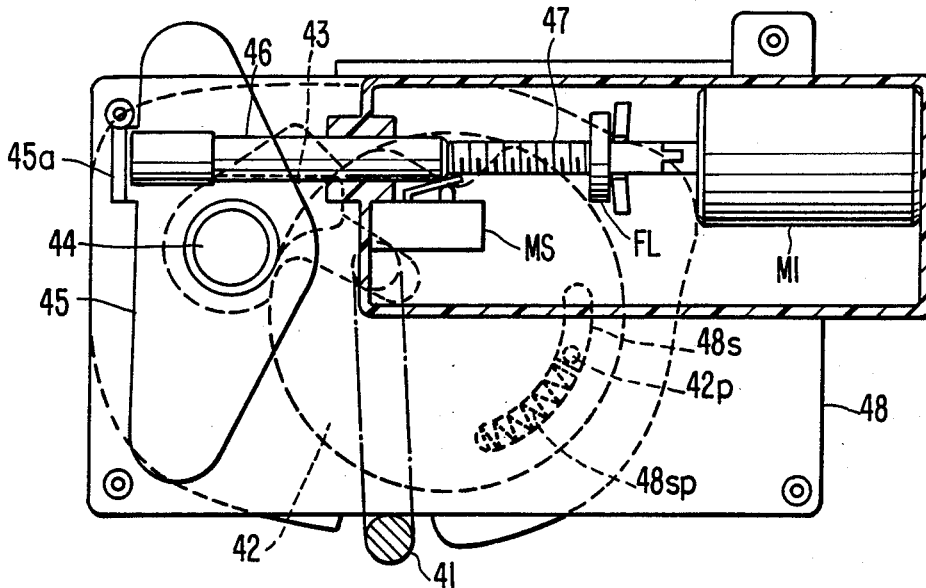
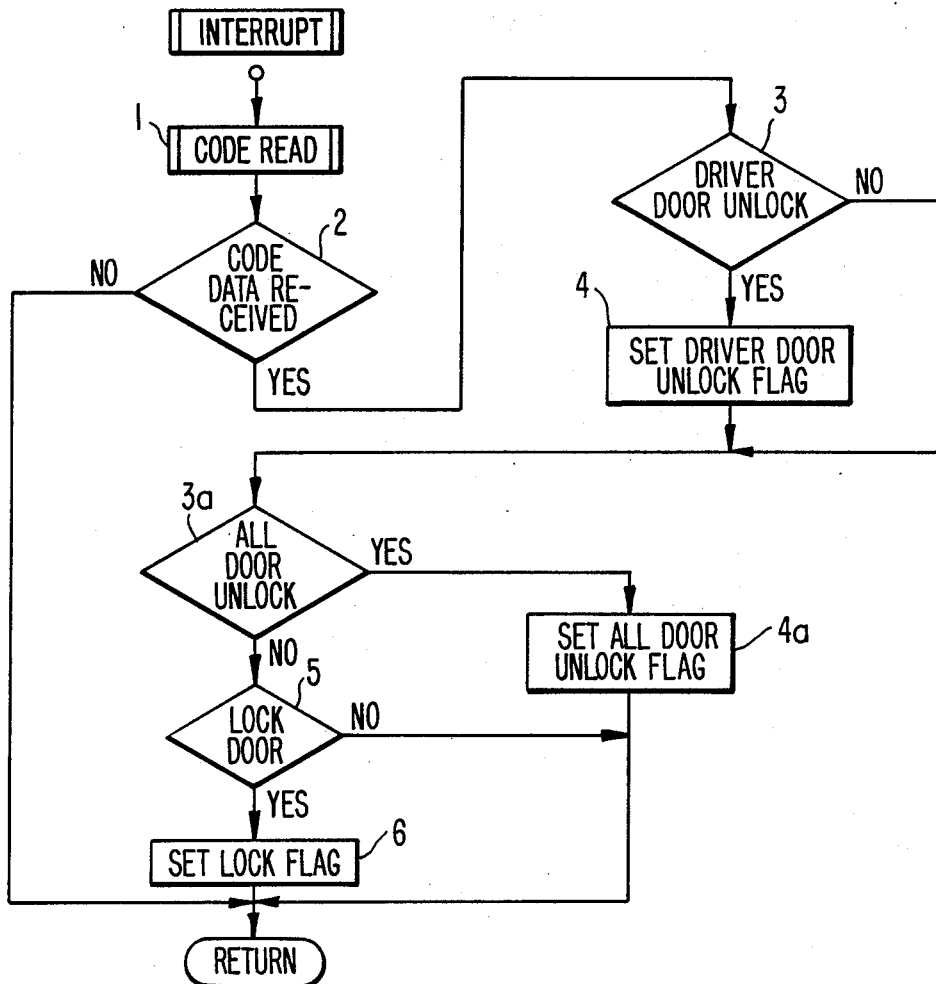


FIG. 5a.



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